

THE AMERICAN PSYCHOLOGIST

VOLUME 3



NUMBER 12

December, 1948

Published Monthly by
THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

Convention Calendar

AMERICAN PSYCHOLOGICAL ASSOCIATION

September 5-10, 1949; Denver, Colorado

For information write to:

Dr. Dael Wolfe, American Psychological Association
1515 Massachusetts Avenue, N. W., Washington 5,
D. C.

MIDWESTERN PSYCHOLOGICAL ASSOCIATION

April 29-30, 1949; Drake Hotel, Chicago, Illinois

For information write to:

Dr. Claude E. Buxton, Department of Psychology
Northwestern University, Evanston, Illinois

EASTERN PSYCHOLOGICAL ASSOCIATION

April 8-9, 1949; Springfield, Massachusetts

For information write to:

Dr. Harold Seashore, Psychological Corporation
522 Fifth Avenue, New York 18, New York

WESTERN PSYCHOLOGICAL ASSOCIATION

About June 20, 1949; Eugene, Oregon

For information write to:

Dr. Lester F. Beck, Department of Psychology
University of Oregon, Eugene, Oregon

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

December, 1949

For further information write to:

Dr. John M. Hutzler, A.A.A.S.
1515 Massachusetts Avenue N.W.
Washington 5, D. C.

THE AMERICAN PSYCHOLOGIST

The Professional Journal of the American Psychological Association, Inc.

DAEL WOLFLE, *Editor*

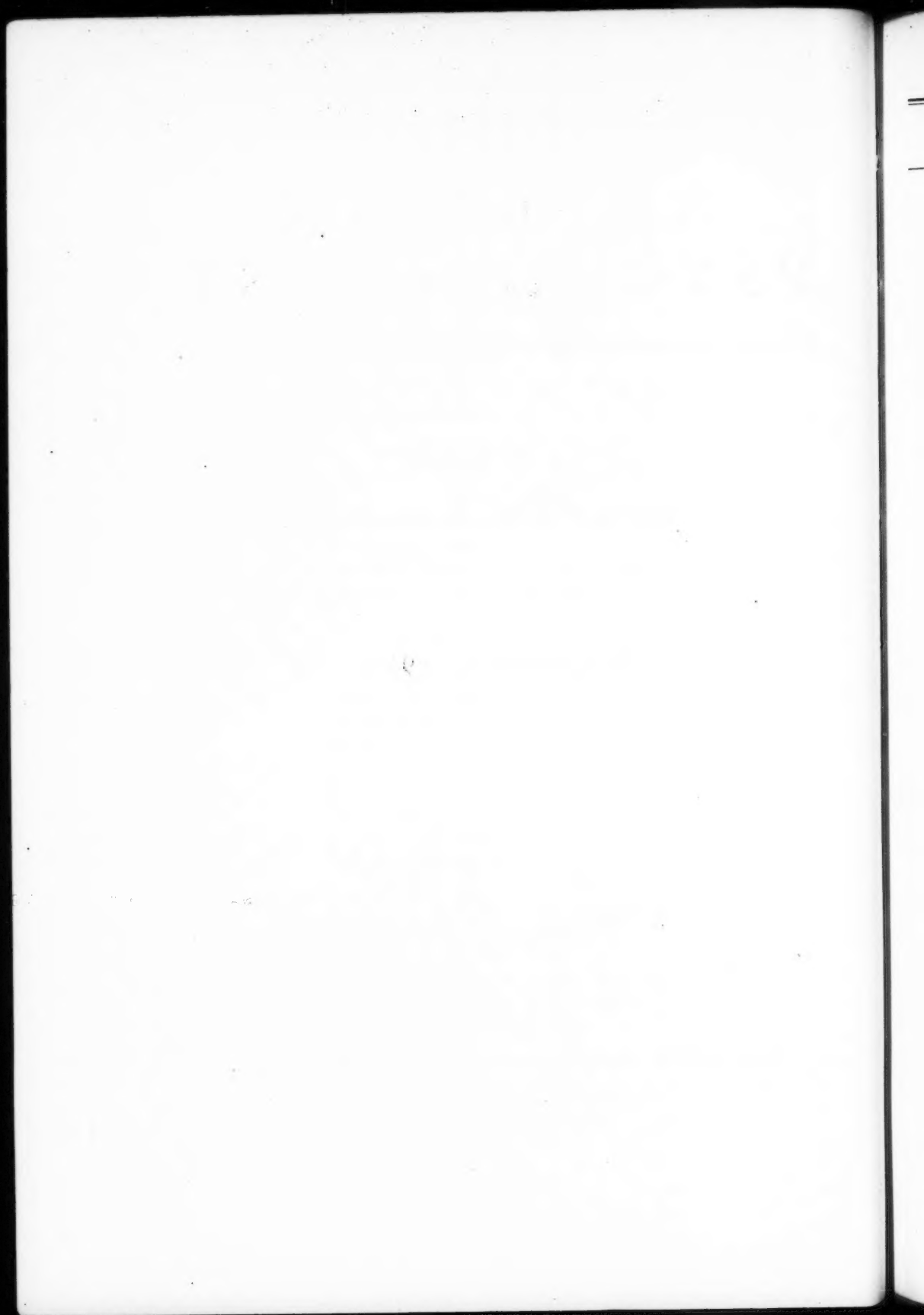
HELEN WOLFLE, *Managing Editor*

VOLUME 3, 1948

Published Monthly by

THE AMERICAN PSYCHOLOGICAL ASSOCIATION, Inc.

1515 MASSACHUSETTS AVENUE N.W.
WASHINGTON 5, D. C.



CONTENTS OF VOLUME 3

JANUARY

	Page
Some Lessons from Aviation Psychology. J. P. GUILFORD.....	3
The Rochester Veterans' Guidance Center Takes Stock. LAURENCE LIPSETT AND LEO F. SMITH.....	12
Developing Applied Psychologists. LOUIS L. MCQUITT.....	16
Stipends for Graduate Students in Psychology and Related Fields: 1948-49.....	20
A Course in the Life Sciences. CLARENCE LEUBA AND HENRY FEDERIGHI.....	30
Across the Secretary's Desk	
Fellowships and Scholarships.....	35
New Applicants for Election to the APA.....	35
Publicity for Psychology.....	35
Psychological Notes and News.....	37

FEBRUARY

The Field of Action Research. ISIDOR CHEIN, STUART W. COOK, AND JOHN HARDING.....	43
Are Psychologists without PhD Degrees to be Barred from Membership in the APA? JOHN G. DARLEY, RICHARD M. ELLIOTT, STARKE R. HATHAWAY, AND DONALD G. PATERSON.....	51
Soldier Intelligence in World Wars I and II. READ D. TUDDENHAM.....	54
Progress Report of the Committee on Psychological Service Centers. WM. CLARK TROW AND JERRY W. CARTER, JR.....	57
Comment	
First Post-War Meeting of the Professional Association of German Psychologists. ERNST AND AENNE BORNEMANN.....	59
Note on Publication of Circulation Figures for Professional Journals. DONALD G. PATERSON.....	60
Across the Secretary's Desk	
The Place of Psychology in an Ideal University.....	61
GEORGE K. BENNETT (portrait).....	65
Psychological Notes and News.....	66

MARCH

Fifty-Sixth Annual Meeting of the American Psychological Association: Boston, Massachusetts, September 7, 8, 9, 10, 11, 1948: Preliminary Announcement.....	75
Call for Papers: Fifty-Sixth Annual Meeting of the American Psychological Association. The Convention Program Committee.....	77
The Development of a Code of Ethical Standards for Psychology. NICHOLAS HOBBS.....	80
Professional Ethics in Institution Practice. FLORENTINE HACKBUSCH.....	85
The Ethics of Textbook Writing. NORMAN L. MUNN.....	88
A Proposal toward a Psychological Research Exchange. FRANCIS W. IRWIN.....	91
Available Internships in Psychology. HELEN MORRILL WOLFE.....	95
The Problem of Prior Publication. Editorial Note.....	98
Suggestions on the Formation of New State Psychological Associations. JAMES Q. HOLSOPPLE, HERMON W. MARTIN, and HARRY J. OLDER.....	101
Needed Research on Examining Devices. DOROTHY C. ADKINS.....	104
The New Division on Maturity and Old Age: Its History and Potential Service. SIDNEY L. PRESSEY.....	107
Comment	
The Scandinavian Meeting of Psychologists in Oslo, 1947. Aase Gruda Skard.....	110
Student Affiliates. FRANCIS P. ROBINSON.....	111
HENRY CHAUNCEY (portrait).....	112
Across the Secretary's Desk	
APA vs. Division Membership.....	113
Psychological Notes and News.....	115

CONTENTS OF VOLUME 3 (Cont.)

APRIL

CARLYLE JACOBSEN (portrait).....	Page 123
Some Quantitative Aspects of Time Magazine's Presentation of Psychology. R. R. BLAKE.....	124
Private Clinicians in Los Angeles. EDWARD JOSEPH SHOEN, JR.....	127
An Analysis of Psychologists in the Classified Telephone Directory. HENRY P. DAVID.....	133
The Public's Attitudes toward Psychologists. LESTER GUEST.....	135
Across the Secretary's Desk	
Requirements for Membership in the Divisions of the American Psychological Association.....	140
What Educational Levels Do Employers Request?.....	141
Psychological Notes and News.....	142

MAY

Is Psychotherapy Dependent Upon Diagnosis? C. H. PATTERSON.....	155
Principles of Directive Counseling and Psychotherapy. FREDERICK C. THORNE.....	160
The Counseling Center at the University of Chicago. DONALD L. GRUMMON and THOMAS GORDON.....	166
The Need for Restandardizing Altered Tests. JAMES W. WILSON and E. KENNETH CARPENTER.....	172
Comment	
A Psychological Research Exchange. EDWIN G. BORING.....	173
"In Press"—A Proposed Service to Psychological Researchers. V. R. FISICHELLI and REGINA MOLLOY FISICHELLI.....	173
Prior Publication. EDWARD K. STRONG, JR.; DONALD G. PATERSON; WALTER V. BINGHAM.....	174
On the Committee vs. the Scientific Approach to Problems of Professional Training. S. L. PRESSEY.....	176
DAVID SHAKOW (portrait).....	178
Across the Secretary's Desk	
The 1948 APA Directory.....	179
Want Ads for Out-of-Print Journals.....	179
Psychological Notes and News.....	180

JUNE

Annual Report of the Policy and Planning Board of the American Psychological Association: 1948.....	187
Ethics and the Social Sciences: RAYMOND B. CATTELL.....	193
The Order of Topics in General Psychology. HARRY RUJA.....	199
Problem-Centered Training in the Development of the Clinician. ABRAHAM S. LUCHINS.....	203
Comment	
Advertising in Telephone Directories. HENRY P. DAVID.....	206
Caution to APA Members about Advertising. GORDON W. ALLPORT.....	206
Prior Publication. CARROLL C. PRATT.....	207
Manual of Test Norms. RALPH F. BERTIE.....	207
Psychological Library of Broadcast Transcriptions. T. ERNEST NEWLAND.....	207
CLARENCE H. GRAHAM (portrait).....	208
Across the Secretary's Desk	
Psychology and Clinical Psychology.....	209
How to Lose Your Vote.....	211
The Notes and News Columns.....	212
Results of Advisory Ballot.....	212
Psychological Notes and News.....	213

INDEX

v

CONTENTS OF VOLUME 3 (Cont.)

JULY

	Page
Program of the Fifty-Sixth Annual Meeting of the American Psychological Association.....	219

AUGUST

Clinical Training Facilities: 1948. Committee on Training in Clinical Psychology.....	317
Criteria for Grading Psychology Students in Practicum Courses. WILLIAM U. SNYDER.....	319
Psychologists in Industry. WALTER V. BINGHAM.....	321
Proceedings of the Fortieth Annual Meeting of the Southern Society for Philosophy and Psychology. JOSEPH WEITZ.....	324
Proceedings of the Twenty-Eighth Annual Meeting of the Western Psychological Association. LESTER F. BECK.....	338
Proceedings of the Twentieth Annual Meeting of the Midwestern Psychological Association. CLAUDE E. BUXTON.....	354
Proceedings of the Nineteenth Annual Meeting of the Eastern Psychological Association. HAROLD G. SEASHORE.....	366
Proceedings of the Eighteenth Annual Meeting of the Rocky Mountain Branch of the American Psychological Association. LAWRENCE S. ROGERS.....	373
Comment	
Changes in 1948 Directory. LAURANCE F. SHAFFER; NEAL E. MILLER.....	374
Note on Ethical Standards. GEORGE K. MORLAN.....	374
Publication of Business Research. ALFRED B. UDOW.....	374
Prior Publication. MAX F. MEYER; GORDON W. ALLPORT.....	375
Psychologists in Telephone Directories. R. D. MAC NITT.....	375
Semantics vs. Therapeutics. RAY H. BIXLER.....	376
HELEN PEAK (portrait).....	377
Across the Secretary's Desk	
A Comparison of the Strength and Weakness of APA Divisions.....	378
Psychological Notes and News.....	381

SEPTEMBER

The Profession of Psychology as Seen by a Doctor of Medicine. ALAN GREGG.....	397
Psychological Implications of Factor Analysis. L. L. THURSTONE.....	402
Personality Organization in Children. JOHN E. ANDERSON.....	409
A Check List of Facts about Jobs for Use in Vocational Guidance. ROBERT HOPPOCK.....	417
Publication of Date of Receipt of Manuscripts by Journals in Psychology and Allied Fields. DONALD G. PATERSON.....	419
Across the Secretary's Desk	
The Selective Service Act of 1948.....	422
Psychological Notes and News.....	423

OCTOBER

DONALD G. MARQUIS (portrait).....	429
Research Planning at the Frontiers of Science. DONALD G. MARQUIS.....	430
An Anthropologist Looks at Psychology. CLYDE KLUCKHOHN.....	439
Measures of Scientific Merit in Applied Psychology. CARL E. SEASHORE.....	443
Instinct: A Composite Student View. W. EDGAR VINACKE.....	446
Comment	
Essential Courses for Undergraduates. IRVINE M. DUNGAN and GERTRUDE S. EKAS.....	450
Psychology and Clinical Psychology: A Reply. ARTHUR TEICHER.....	450
Are Our Silent Presuppositions about Prejudices Correct? GUSTAV ICHHEISER.....	451
Across the Secretary's Desk	
Who Runs the APA?.....	452
Psychological Notes and News.....	454

CONTENTS OF VOLUME 3 (Cont.)

NOVEMBER

	Page
APA Officers, Division Officers, Editors, Committees, Representatives, and Related Organizations: 1948-1949.....	461
Proceedings of the Fifty-Sixth Annual Business Meeting of the American Psychological Association, Boston, Massachusetts. HELEN PEAK.....	470
Annual Report of the Executive Secretary: 1948. DAEL WOLFE.....	503
The Attitudes of Psychologists toward Psychological Meetings. ALBERT ELLIS.....	511
Functional Specifications for a Sound Recorder for the Psychological Clinic. VICTOR C. RAIMY.....	513
Across the Secretary's Desk	
1949 Dues.....	519
Publication Policies and Problems.....	519
Psychological Notes and News.....	521

DECEMBER

Military Utilization of Psychologists during World War II. T. G. ANDREWS and MITCHELL DREESE.....	533
Personnel Methods in Business Management. ROGER M. BELLWS.....	539
Women in American Psychology: Publications. FANNIE ARMITT HANDRICK.....	541
A Bibliography on Careers in Psychology: II. GEORGE J. DUDYCHA.....	543
Comment	
Contemporary American and British Psychological Scenes. JAMES DREVER, JR.; WILLIAM STEPHENSON.....	547
Listing of Professional Psychologists in the Classified Telephone Directory. J. A. MORRIS KIMBER.....	550
Professional Ethics for Women Psychologists. JANE LOEVINGER.....	551
Notehand for Psychologists: Further Comment. RICHARD B. SEYMOUR.....	551
Advantages of a College Education. MARIAN R. BALLIN.....	553
Ethics in Experimental-Subject Relationships. FRANCIS J. IRWIN.....	553
Student Affiliates.....	554
RENSIS LIKERT (portrait).....	555
Across the Secretary's Desk	
The Polls: Straw Votes or Scientific Instruments. RENSIS LIKERT.....	556
Psychological Notes and News.....	558
Index to Volume 3.....	562

TH

Volume

THE
Royal
matter
Maryk
commi

Dael

Enter
Accep

THE AMERICAN PSYCHOLOGIST

The Professional Journal of the American Psychological Association, Inc.

Volume 3

December, 1948

Number 12

In this Issue

Military Utilization of Psychologists during World War II. T: G. ANDREWS AND MITCHELL DREESE	533
Personnel Methods in Business Management. ROGER M. BELLOWS	539
Women in American Psychology: Publications. FANNIE ARMITT HANDRICK ..	541
A Bibliography on Careers in Psychology: II. GEORGE J. DUDYCHA	543
Comment	547
Student Affiliates	554
Rensis Likert (portrait)	555
Across the Secretary's Desk	556
Psychological Notes and News	558
Index to Volume 3	562

THE AMERICAN PSYCHOLOGIST is published monthly by the American Psychological Association, Inc., at Mount Royal and Guilford Avenues, Baltimore 2, Maryland. Subscription: \$7.00, single copy \$.75. Communications on business matters should be addressed to Publishers, The American Psychologist, Mount Royal and Guilford Avenues, Baltimore 2, Maryland, or the American Psychological Association, Inc., 1515 Massachusetts Ave., N.W., Washington 5, D. C. Address communications on editorial matters to 1515 Massachusetts Ave., N.W., Washington 5, D. C.

Dael Wolfe, *Editor*

Helen Wolfe, *Managing Editor*

Entered as second-class matter January 9th, 1946 at the Post Office at Baltimore, Md., under the Act of March 3rd, 1879. Acceptance for mailing at special rate of postage provided for in section 538, Act of February 25, 1925, authorized August 6, 1947.

OFFICERS OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

President

ERNEST R. HILGARD
Stanford University
California

President-elect

J. P. GUILFORD
University of Southern California
Los Angeles, California

Recording Secretary

HELEN PEAK
Connecticut College
New London

Treasurer

CARROLL L. SHARTLE
The Ohio State University
Columbus 10, Ohio

Executive Secretary

DAEL WOLFLE
1515 Massachusetts Ave., N.W.
Washington 5, D. C.

Board of Directors

THE PRESIDENT, THE PRESIDENT-ELECT,
THE RECORDING SECRETARY, AND THE TREASURER

CLARENCE H. GRAHAM

ROBERT R. SEARS

CARL I. HOVLAND

LAURANCE F. SHAFFER

THEODORE M. NEWCOMB

RUTH S. TOLMAN

All general communications, inquiries concerning membership, letters concerning dues, subscriptions, and changes of address, announcement of posts, and requests for placement should be directed to:

AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.
1515 Massachusetts Avenue, N.W.
Washington 5, D. C.

PUBLICATIONS OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

AMERICAN PSYCHOLOGIST

Editor: DAEL WOLFLE, *American Psychological Association*. Contains all official papers of the Association and articles concerning psychology as a profession; monthly. Subscription: \$7.00 (Foreign \$7.50). Single copies, \$0.75.

JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY

Editor: GORDON W. ALLPORT, *Harvard University*. Contains original contributions in the field of abnormal and social psychology, reviews, and case reports; quarterly. Subscription: \$5.00 (Foreign \$5.25). Single copies, \$1.50.

JOURNAL OF APPLIED PSYCHOLOGY

Editor: DONALD G. PATERSON, *University of Minnesota*. Contains material covering applications of psychology to business, industry, and education; bi-monthly. Subscription: \$6.00 (Foreign \$6.50). Single copies, \$1.25.

JOURNAL OF COMPARATIVE AND PHYSIOLOGICAL PSYCHOLOGY

Editor: CALVIN P. STONE, *Stanford University*. Contains original contributions in the field of comparative and physiological psychology; bi-monthly. Subscription: \$7.00 (Foreign \$7.50). Single copies, \$1.25.

JOURNAL OF CONSULTING PSYCHOLOGY

Editor: LAURANCE F. SHAFFER, *Teachers College, Columbia University*. Contains articles in the field of clinical and consulting psychology, counseling and guidance; bi-monthly. Subscription: \$5.00 (Foreign \$5.50). Single copies, \$1.00.

JOURNAL OF EXPERIMENTAL PSYCHOLOGY

Editor: FRANCIS W. IRWIN, *University of Pennsylvania*. Contains original contributions of an experimental character; bi-monthly. Subscription: \$7.00 (Foreign \$7.25). Single copies, \$1.25.

PSYCHOLOGICAL ABSTRACTS

Editor: C. M. LOUETTIT, *University of Illinois, Galesburg, Illinois*. Contains noncritical abstracts of the world's literature in psychology and related subjects; monthly. Subscription: \$7.00 (Foreign \$7.25). Single copies, \$0.75.

PSYCHOLOGICAL BULLETIN

Editor: LYLE H. LANIER, *New York University*. Contains critical reviews of books and articles and critical and analytic summaries of psychological fields or subject matter; bi-monthly. Subscription: \$7.00 (Foreign \$7.25). Single copies, \$1.25.

PSYCHOLOGICAL MONOGRAPHS: GENERAL AND APPLIED

Editor: HERBERT S. CONRAD, *U. S. Office of Education*. Contains longer researches and laboratory studies which appear as units; published at irregular intervals at a cost to author of about \$2.50 a page; author receives 150 copies gratis. Subscription: \$6.00 per volume of about 500 pages (Foreign \$6.30). Single copies, price varies according to size.

PSYCHOLOGICAL REVIEW

Editor: CARROLL C. PRATT, *Princeton University*. Contains original contributions of a theoretical nature; bi-monthly. Subscription: \$5.50 (Foreign \$5.75). Single copies, \$1.00.

MILITARY UTILIZATION OF PSYCHOLOGISTS DURING WORLD WAR II¹

T. G. ANDREWS²

AND

MITCHELL DREESE

*Research and Development Group, Logistics Division,
General Staff, United States Army*

George Washington University

THE following information and conclusions were drawn from the analysis of a questionnaire mailed to all members of the American Psychological Association. This questionnaire accompanied the one for the biographical entries of the 1948 Directory of APA members and included questions concerning the wartime services and activities of the members. A total of 1561 questionnaires was abstracted from all those received by the central office of the APA. This represents about 30% of the total membership of the APA, and we estimate that our sample contained between 80 and 90% of the appropriate population: psychologists who had been in military service or who had worked as civilians for some branch of the Military Establishment, either in government research, government-sponsored research, or government work other than research. These questionnaires were submitted to the Research and Development Group, Logistics Division, of the Army General Staff for analysis in the Scientific Manpower Section. The information tabulated included: (a) highest academic degree attained, (b) year of highest degree, (c) pre-war work status, (d) post-war work status, (e) principal civilian work during the time of war, (f) method of entry into military service, (g) branch of the military service entered, (h) type of membership in the APA, and (i) degree of utilization of professional training during military service. The "degree of utilization" was evaluated in terms of responses to the following numbered scale, and each person responding was asked to check the sentence which seemed best to describe his utilization.

1. Full utilization in primary field and at proper level of competence while in military service.
2. Utilization in primary field for at least half of the time spent in military service.
3. Utilization in a collateral field of scientific training or experience throughout most of military service.
4. Utilization in either primary or collateral fields during a relatively short portion of military service.
5. Utilization in neither primary nor collateral fields at any time during military service.

In addition to the information obtained from responses to the types of items described above, each person who served in the military was also requested to present suggestions for the better utilization of psychologists in time of national emergency.

The data from the 1561 questionnaires were tabulated and analyzed by means of IBM equipment, and cross-percentages were computed between all the factors described above.³ The analyses of the resulting contingency tables were based on the following general questions. To what extent was use made of the professional training and skills of psychologists in military service during World War II? What factors were related to the utilization of psychologists' professional skills? In what capacities did civilian psychologists serve in government activities or government-sponsored work during the war, and what factors were related to their use in their capacities? What factors were related to the entrance into each of the several branches of military service? What is the present work status of the psychologists sampled, and what factors appear to be related to any trends in occupational shifts? What recommendations should be made for better organization and utilization of professional psychologists in the advent of another national military emergency? These questions were the major ones studied in the present analysis.

³ We are indebted to Mr. Eugene Zander and to Dr. Paul D. Gard for the tabulations and calculations involved in obtaining the data for this study.

¹ The authors wish to express their gratitude to Dr. D. M. Delo, Chief of the Scientific Manpower Section, for his stimulation and cooperation in making this study possible. The interpretations and recommendations presented here do not necessarily reflect any official opinions of the National Military Establishment.

² On leave of absence from the University of Chicago.

FACTORS RELATED TO THE UTILIZATION OF PSYCHOLOGISTS IN THE ARMED FORCES

The contingency tables on which this analysis was based follow the form of Table 1. The percentage entry, in italics, represents percentage of row total. A study of the last row of Table 1 indicates that 46% of the 1168⁴ psychologists in military service judged that they were fully utilized in their primary field of specialization and at the proper level of their competence. When utilization categories 1 and 2 are combined, we find that 72% of the psychologists felt that their professional training and skills were utilized for at least half of the time they were in

Branches of Military Service. Of the total number of psychologists in Military Service (this sample), 93% were in either the Army, Navy, or Air Force. No important differences were found between these three major services in terms of the proportion of each who felt their services were satisfactorily used. However, of the 292 psychologists in the Navy, 9% judged that they had not been utilized in their primary or collateral fields of training to any extent. This percentage is relatively higher than those for the Army or Air Force.

Pre-War Fields of Work. The work of the psychologists in our sample, prior to the war, was classi-

TABLE 1
Degree to which psychological training was utilized by the several branches of the military forces, as reported by 1168 members of the APA

BRANCH OF MILITARY SERVICE	DEGREE OF UTILIZATION DURING MILITARY SERVICE											
	1 (Most)		2		3		4		5 (Least)		Total N	Percentage of Sample in each Service
	N	Per cent	N	Per cent	N	Per cent	N	Per cent	N	Per cent		
Army.....	217	45.0	151	31.3	55	11.4	42	8.8	17	3.5	482	41.3
Air Force.....	135	42.6	93	29.3	45	14.2	34	10.7	10	3.2	317	27.2
Navy.....	139	47.6	58	19.9	48	16.4	20	6.9	27	9.2	292	25.0
Marines.....	3	25.0	1	8.3	5	41.7	0		3	25.0	12	1.0
Coast Guard.....	2	33.3	0		2	33.3	1	16.7	1	16.7	6	0.5
Merchant Marines.....	6	66.7	2	22.2	0		0		1	11.1	9	0.8
WAC.....	6	54.5	1	9.1	2	18.2	1	9.1	1	9.1	11	0.9
WAVE.....	14	53.9	3	11.5	5	19.2	3	11.5	1	3.9	26	2.2
SPAR.....	0		0		0		1		0		1	0.1
U. S. Public Health Service.....	10	83.4	1	8.3	1	8.3	0		0		12	1.0
Total.....	532	45.7	310	26.5	163	13.9	102	8.7	61	5.2	1168	100.0

military service. The data from the study by Britt and Morgan agree with this conclusion (*Amer. Psychologist*, 1946, 1, 423-437).

When comparisons are made with the results on other groups of scientific personnel in military service, it is found that psychologists fared better than most. Table 2 shows that the percentage of psychologists falling in utilization categories 4 and 5 was smaller than for any of the other science groups compared here.

⁴The 1168 total does not, of course, represent the total number of psychologists who served in the Armed Forces, although it appears to be a satisfactory sample of that population. Actually, 1170 appeared in the sample, although 2 were not represented in several tables due either to omitted responses on certain inventory items or to omissions in the IBM processing.

fied as: academic, clinical, industrial, government, student, unemployed or retired. It was found that 89% of the psychologists in military service were in academic or government positions or were graduate students before entering the Armed Forces. Relatively few came from clinical or industrial work. It is to be presumed, however, that many of those in academic work were teaching in the fields of clinical or industrial psychology. Those who came into service from the academic field were utilized at their highest level of competence more frequently than were government workers or students. Those who had worked as clinical psychologists appeared to have been more satisfactorily used than any other single group, and relatively fewer of them were used in totally non-psychological work. The graduate

students were of troop age and consequently were placed in combat units more frequently, thus lowering their utilization in professional pursuits. Although there were only 36 industrial psychologists in this sample, their utilization at highest competence was less frequent than for any other experienced group and was on the same level as graduate students. This observation is tempered by the fact that more industrial psychologists were utilized at top competence for at least half the time of their military service.

TABLE 2

Comparison of different scientific groups in terms of utilization

	N	DEGREE OF UTILIZATION DURING MILITARY SERVICE				
		1 (Most)	2	3	4	5 (Least)
		Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Geologists.....	605	5.0	21.6	22.3	13.5	36.2
Physicists.....	606	53.3	15.8	2.4	23.0	5.5
Chemists.....	4043	24.0	12.6	20.3	15.8	27.3
Psychologists.....	1168	45.7	26.5	13.9	8.7	5.2

Level of Academic Training. The relations between highest academic degree attained and degree of professional utilization in military service were analyzed in similar fashion to the data in Table 1. In our sample there were 47% with the PhD, 47% with the MA, and 6% with the AB. Thus, those holding a postgraduate degree constituted 94% of the psychologists in service. Of those most effectively utilized (category 1), 52% held PhD's and 44% held MA's. Conversely, of those whose training was most ineffectively utilized (category 5), 33% held PhD's and 59% MA's. These data indicate the relatively higher average utilization of those psychologists with the more advanced training. Yet, of those holding only the AB, as many as 70% were utilized at what they considered a satisfactory level for at least one-half their time in service.

When the data were analyzed to determine the relations between academic degree attainment and the branch of service entered, it was found that the Navy received considerably more psychologists with PhD's than did the other services in terms of the total number of psychologists in each of the services. The Navy received fewer psychologists holding only the AB than did the other two major services. These data corroborate the results presented by Britt

and Morgan. This loading of PhD's in the Navy appears to bear no relationship to the relative effectiveness of total utilization within that service (as shown in Table 1), although one might expect such a relationship on the basis of the higher educational level.

In regard to utilization of PhD psychologists, it is of interest that 59% of them entered service from academic work. It was previously indicated that the academicians were in general well utilized. These interrelationships cannot be interpreted causally.

Closely related to academic background and highest degree held is the factor of Associate or Fellow status in the APA. Of the 147 Fellows in Military Service, 64% were utilized at highest levels, and of the 1021 Associates, 43% were utilized at highest levels of proficiency. Of those psychologists used to minimal extent professionally, 97% were Associate members and only 3% were Fellows of the APA.

Method of Entry Into Armed Services. It was found that those psychologists best utilized at their judged level of professional competence came into Military Service through direct commission relatively more often (49%) than by voluntary enlistment (15%), from the Reserve (8%), or by the draft (28%). The Reserves and direct commissions fared best. Even among those drafted or voluntarily enlisting, there was an appreciable tendency for their training and experience in psychology to be put to relatively good use. Of the Reserves 57%, and of those directly commissioned 31%, held the PhD, which in itself shows the interrelations between training, effective utilization, and method of entry into service. It should be noted that 18% of the PhD's in this sample were drafted into the military services.

Those directly commissioned came more often from the academic profession and those drafted or voluntarily enlisting tended in the main to have been students immediately prior to induction. Fellows of the APA tended to enter the services by way of direct commission (73%) or reserve status (13.5%), while the Associates entered more frequently through the draft.

FACTORS RELATED TO THE WARTIME ACTIVITIES OF CIVILIAN PSYCHOLOGISTS WORKING FOR MILITARY SERVICES

In addition to the psychologists in the military services, 518 members of the APA worked for the Military Establishment in civilian capacities. It

was found that 44% of this group were doing government research, 39% worked in non-research capacities (presumably in personnel or administration), and 17% were performing government-sponsored research. These civilian psychologists before the war were mainly engaged in the academic profession (52%) or as graduate students (27%).

Of the relatively small number of clinical psychologists who worked for the military in civilian capacity during the war (28), the majority were not engaged in research (71%). Further analysis of the data revealed that 71% of the civilian psychologists held the PhD and 24% the MA; 74% of the Fellows of the APA included in our study were engaged in government or government-sponsored research as compared with 54% of the Associates.

FACTORS RELATED TO BRANCH OF MILITARY SERVICE ENTERED BY PSYCHOLOGISTS

A proportionately larger number of psychologists entered the Navy from the academic profession: 44% as compared with 34% for Army and 32% for Air Force. Also, as pointed out before and related to this proportion, the Navy received proportionately more PhD's in psychology. The Air Force received proportionately more graduate students: 52% compared to 40% for Army and only 32% for Navy. Only 7% of the psychologists entering military service went into branches other than Army, Navy or Air Force; these other services include Marines (13), Coast Guard (6), Merchant Marine (9), WAC (11), WAVE (26), SPAR (1), and U. S. Public Health (12).

Although there were 1.4 times as many WAC's in service as there were WAVES, our data show that more than twice as many women psychologists went into the WAVES.

The composition of the major services in terms of type of APA memberships indicates that, proportionately to the number of psychologists in each service, there were more than twice as many Fellows in the Navy as in the Army. Concerning the relationships between methods of entry and branch of service, a disproportionate number entered the Navy by means of direct commission; a disproportionate number entered Air Force by voluntary enlistment; and a disproportionate number entered the Army by way of the draft.

FACTORS RELATED TO THE PROFESSIONAL WORK STATUS OF PSYCHOLOGISTS

A comparison was made between the pre-war and post-war work status of the psychologists in our total sample shows that three times as many of this group are now engaged in clinical work as was the case prior to the war. The proportion of this group recently employed in industry has more than doubled since the pre-war period. There has been only a slight increase in the proportion of this group going into academic work, and there has been a slight decline in the proportion employed by the government. Most of the supply for these increases has been from the group previously working as graduate students. The students have not, however, entered the major fields in proportion to their pre-war size; the degree to which these shifts in work are attributable to war work and experiences and the extent to which they reflect present employment opportunities cannot be judged.

More detailed analyses of the present work status of these psychologists were made in terms of highest academic degrees attained and type of APA membership. It is obvious that there would be a strong contingency between academic work and the holding of the PhD. It was further found that among clinical psychologists, the PhD is more commonly held by those in private practice and those working in private clinics or guidance centers than for those in state, municipal, or federal institutions or working as school psychologists. These latter most commonly hold the MA as the highest degree earned. The psychologists in industry more often hold the PhD than a lower degree. Those non-clinical psychologists working in the government more commonly hold the PhD if engaged in research but not if engaged in personnel or administrative capacities. At the time our sample was obtained, almost 75% of the Fellows of the APA were in academic work, as compared with 40% of the Associates.

OPINIONS OF PSYCHOLOGISTS IN SERVICE

In addition to the items tabulated above, the questionnaire included a blank space within which those sampled were asked to state their recommendations for better organization and utilization of psychologists during any future national military emergency. These qualitative responses were analyzed; a total of 407 had made cogent recommendations.

The largest number of those making recommendations suggested that psychologists within the Armed Forces should be assigned to units and to jobs in accordance with their levels of training and particular fields of specialization. Also a considerable number suggested that a separate corps or unit (such as the Medical Corps) should be established for psychological services. The military problems raised by this recommendation are not easily solved, however. A further recommendation frequently made was to the effect that the military should be made more aware of the nature of psychologists' work and their skills. This latter suggestion would, of course, help in the proper assignment of psychologists to their duties and would also help considerably in the more effective planning of needs and uses of psychologists in scientific manpower mobilization.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The data for this survey were gathered from 1561 psychologists who were in military service or government work connected with the military during World War II.

General Results of the Survey. A large proportion of the members of the APA were in military service and in general they felt their professional training and skills to have been well used; they were more favored in this regard than most other groups of scientists. It is to be recalled that they had an active office in Washington, D. C. for recommending personnel action, and also that there were several relevant communications made available to psychologists through notes and by articles in the *Psychological Bulletin*. These organized systems were designed to serve both the psychologists themselves and the armed forces who knew of their needs in specialized personnel. The psychologists in our sample of those in service came mainly from academic and government work as graduate students. Those from academic work more frequently held doctor's degrees; were more frequently commissioned directly; and were better utilized. Those relatively few who had been working as clinical psychologists were less often used in non-psychological work during their period of service than the other professional (non-academic) or student groups.

In general, there was a strong tendency for those with more advanced training to be used at the highest levels of technical effectiveness. There is, of course, a confounding of age with the factor of advanced training, those of less training being more

often of troop age and being used for non-technical manpower.

Those commissioned directly into the services were well utilized professionally as were those who came into service as reserve officers. These psychologists had attained higher levels of training. A relatively small but nevertheless appreciable number of PhD's were drafted (97).

There were at least 518 psychologists who worked at least parttime for the government as civilians connected with military activities during the period of the war. Only 49 of these were working in government service before the war.

The composition of the three major military services was not proportional to total supply in terms of the number for each service entering with different backgrounds of training. The Navy received more psychologists holding the PhD. Disproportionate numbers entered the Navy by direct commission, the Air Force by voluntary enlistment, and the Army by way of the draft.

Analysis of the past and present work status of the sample of psychologists indicated that large shifts in work status have been characteristic of the profession since before the war. Those who were graduate students prior to entry into service have not drifted to the several branches of the profession in the same proportions as before the war. Clinical and industrial work have shown the greatest increases, based on estimates from our sample of 1560.

Recommendations. Although the survey indicates that psychologists were on the whole effectively utilized during the war, there are nevertheless several suggestions which can be made for even more effective utilization in the event of another national military emergency.

The previously effective utilization of psychologists indicates that possibly an even greater number could be used in their technical capacities by the armed forces. There is a need for timely data accruing from continuous studies of supply and demand in relation to the overall plans of the National Military Establishment. Such studies should continue within the services and also by liaison with the central office of the APA. A committee of civilian psychologists has been organized for purposes of liaison between the APA and the General Staff of the Department of the Army.

In organized planning for mobilization, account should be taken of the relative lack of information on the part of the military about the services which

psychologists are equipped to give. This lack of information was decreased considerably during the last war, but there is still much to be done in this direction. The several school systems within the military organizations are giving information about these services, but such information has not as yet sufficiently wide audience of military officers to make them fully able to employ and classify psychologists.

Work simplification procedures should be carried out for every major psychological job in military work. The level of competence and area of specialization for each such job should be determined. Such job analyses would serve to minimize the use of highly trained and competent psychologists in the rather more routine types of military assignments and would aid a large number of psychologists more effectively to make their contributions to a war effort.

The widespread view among psychologists that a separate corps or unit be established for them, such as the Medical Corps, should be carefully evaluated.

It is recommended that a study be made to determine the type of organization to which psychologists might be assigned for maximal effectiveness and utilization of their skills.

Since so few women (20) were used as military psychologists in relation to the number in the APA (about 1750), it would seem desirable to make the federal and military organizations more aware of the ways in which the skills of women psychologists may be utilized.

In addition to the above recommendations that spring from analyses of military utilization of psychological personnel, it would appear desirable for more civilian psychologists to devote portions of their research time to problems of military worth. No encroachment on academic and research freedom is implied by this recommendation, but it is considered useful to continue pointing out the interest in and desirability of research in military psychology.

Received June 7, 1948

PERSONNEL METHODS IN BUSINESS MANAGEMENT

ROGER M. BELLOWS

Wayne University

BUSINESS management has increasingly sought aid from schools of business and from departments of psychology. This condition is reflected in requests by business for graduate students trained by internships in personnel methods as well as for special programs and institutes for business executives. Wayne University has developed during the past two years a unique department within its School of Business Administration—a department of personnel methods¹—to comply with these requests.

The department hopes to contribute to establishing the field of personnel management as a technology and a profession. At this time the field is only dimly defined and it is not well recognized. Psychology, as well as law, engineering, sociology, economics, accounting, and other areas, has much to contribute to personnel management. Personnel management is considered the technology of the maximum utilization of available manpower accompanied by maximum worker satisfaction.

The department of personnel methods has been organized and staffed to render service to industrial personnel management. A primary goal is to serve through training industrial personnel staffs. This is accomplished in several ways:

First, internship training in problems such as interviewing, selection, placement, turnover, job and employee evaluation, and employee counseling is provided for qualified graduate students employed part- or full-time within industrial or business establishments.²

Second, institutes are offered on such problems as job analysis, job evaluation, selection, supervisory training, employee evaluation, and morale problems. These accommodate personnel directors and their assistants with short programs that are specially developed upon request.

Third, cooperative programs of training are being conducted. The department provides training, approves qualified instructors, and assists in program development in personnel management phases of production management training programs. A training program at the Ford Motor Company is arranged by contract with Wayne University.

Fourth, the department publishes summaries of studies in personnel methods. In cooperation with the Michigan Industrial Training Council, an abstract publication, *Industrial Training Abstracts*, was developed. Issued quarterly, it is now in its second year. A variety of selected personnel and business journals, government publications, books, and a few papers from unpublished sources are abstracted in non-technical language. A portion of its coverage overlaps with that of *Psychological Abstracts*.

Fifth, another service offered is the survey and summary report of personnel practices utilized by various companies. Two such surveys have been completed. One was designed to determine current status of management policies, research and control pertaining to the several personnel activities in department stores across the country. Another was a minor study on the use of visual aids in sales employee training in the Detroit area.

Sixth, as a part of its service the department offers formal courses of instruction, student guidance in

employees are graduate students in the department of personnel methods include the Ford Motor Company, several divisions of the General Motors Corporation, Parke-Davis and Company, Packard Motor Car Company, Nash-Kelvinator Company, The J. L. Hudson Company, The Michigan Bell Telephone Company, The Detroit Edison Company. Some 70 graduate students are now enrolled.

¹ The staff of the department of personnel methods includes: Francis G. Armstrong (law, part time); M. F. Estep (business administration); Chester E. Evans (industrial psychology); E. B. Greene (industrial psychology, part time); Claude Nemzek (educational psychology, part time); Don H. Palmer (industrial education); Edward T. Raney (industrial psychology); John H. Rappaport (industrial psychology, part time); John R. Richards (economics); Charles E. Scholl, Jr. (personnel management); Ronald F. Wilson (industrial psychology); Greydon Worbois (industrial psychology, part time).

² Industrial and business firms whose personnel department

minor research, and seminars. The number of separate courses listed and offered by the department has increased from four in 1945 (at that time offered in a business administration department) to the courses to be offered in the fall semester of 1948 which are listed below:

Business Occupations	Advanced Course in Personnel Training
Personnel Management I	Survey of Occupations
Personnel Management II	Current Research Publications
Supervisor-Employee Relations	Employee Communications
Selection Techniques	Employee Counseling
Interviewing Techniques	Wage Administration
Job Analysis	Time and Motion Study
Job Evaluation	Minor Problems in Personnel Research
Merit Rating	Personnel Management and the Labor Contract
Safety Administration	Legal Aspects of Labor Relations
Employment Stabilization Plans	Research in Personnel Management
Survey of Retail Personnel Practices	Experimental Design for Statistical Analysis
Attitude and Opinion Sampling in Business and Industry	Recruitment and Labor Market Analysis
Personnel Research Seminar	Techniques of Personnel Program Evaluation
Employee Motives and Incentives	Criteria of Employee and Supervisor Efficiency
Reports and Theses in Personnel Methods	Thesis Direction
Personnel Managerial Records and Controls	
Personnel Training	

Some advisory service is being rendered the University on student affairs, student counseling and placement, and job evaluation of university jobs.

The department has served the University by co-operating with the College and Professional Testing Programs of the American Institute of Accountants. Validity and norm data have been obtained on students majoring in the School of Business Administration's department of accounting with a view to establishing more effective counseling and selection tools for screening prospective students in this field. Information has been gathered and analyzed from two of the larger public accounting firms in Detroit.

Several general areas of problems encountered in industrial Detroit will require research of comprehensive scope, if the personnel methods area is to achieve full status as a scientific technology. Some of these are:

Job Evaluation. Reliability of data, overlap of so-called factors, weighting of factors, and validity considerations are of significance. In practice, job evaluation is conducted without regard to controls that psychologists have used routinely in the measurement of individual differences. Criteria for

evaluating factor ratings are hard to find. Most realistically, the going community pay rate for the jobs being evaluated is probably the best criterion available. Factor analysis techniques might be applied more frequently to job evaluation data with profit.

Criteria of vocational success. Obtaining basic criteria of success, especially in the area of executive employee audits and analysis, remains one of the most difficult and at the same time fundamental problems. Merit ratings, when used for criteria, are often not checked for reliability, yet other variables are appraised against them by correlation methods. Greater emphasis upon analysis and developments of criteria is indicated.

Evaluating training. The development and evaluation of tools for appraising training programs in business and industry is a timely and realistic problem. Application to industrial training of the several workable rules of learning and of techniques for measuring transfer developed by the educational psychologist would likely be profitable if done on an evaluative, experimental basis.

Personnel cost accounting. To be meaningful in business and industry, new methods in personnel management must show, in dollars and cents, an increase in profits to the firm. Under present experimental design it is rarely possible to analyze costs in this way. The need for new statistical methods and for collaboration with cost control and analysis specialists is evident.

Biomechanics. Arrangement of the work situation by psychological job analysis, to attain maximum output with least effort, is a goal for which specialists from many fields, and with as many different approaches, are striving. This is an area in which psychologists may render real service by co-operative effort and planning.

CONCLUSIONS

Several personnel methods problems present a challenge not only to the industrial psychologist but to professionals in the field of economics, law, and sociology. Solution to many of these problems lies in well-coordinated action that cuts across conventional "field" boundary lines.

Personnel methods may contribute approaches to sound personnel procedures through training industrial staffs in research techniques, with appropriate checks on the goodness of the tools used.

Received March 18, 1948

WOMEN IN AMERICAN PSYCHOLOGY: PUBLICATIONS

FANNIE ARMITT HANDRICK

Harvard University

BRYAN and Boring in their study of women in American psychology have suggested that the male psychologists probably do four-fifths of the research and writing in American psychology. If there are twice as many men as women in the profession and a man averages twice as much research as a woman, then the men would do four-fifths of the research and writing (3, p. 17). The present study¹ undertakes to check that hypothesis. Bryan and Boring used American PhD's on whom the degree was conferred in 1921-1940. The present study considers the publications of all American psychologists whose work is cited in *Psychological Abstracts* for 1939 (Vol. 13). That year was chosen as the most recent "normal" year before World War II changed professional habits.

The 1939 Yearbooks of the American Psychological Association and the American Association for Applied Psychology were used to identify American authors. Any author who was a member of one or both of these societies at that time was assumed to be American for the purposes of this investigation. To be counted, the original publication had to be more than two pages long. Anything labelled "abstract" was omitted. The accepted publications were classified according to type; e.g., book, comment, etc., and also according to the fourteen divisions appearing then on the cover of *Psychological Abstracts*. The sex of each author was determined either from his given name or by correspondence with the individual himself. In the case of joint publications, each author was given credit for a fractional publication—the size of the fraction being the reciprocal of the number of authors.

The matching of the author index of Volume 13 of *Psychological Abstracts* and the Yearbooks of the two

societies yielded a list of 784 authors of publications meeting the criterion—633 men and 151 women. These authors produced 1189.4 publications, 994.9 (83.6%) of them by men and 194.5 (16.4%) by women. Thus Bryan and Boring's suggested 4:1 ratio is approximated, since 994.9/194.5 is 5.12.

TABLE 1

Amount of professional writing done by psychologists in 1939

For persons who were members of the American Psychological Association or of the American Association for Applied Psychology in 1939 and whose publications were cited in *Psychological Abstracts* for 1939.

NUMBER OF PUBLICATIONS	MEN	WOMEN	TOTAL
	%	%	%
0.0- 0.9	20.8	27.0	22.2
1.0- 1.9	47.2	51.5	48.5
2.0- 2.9	20.8	11.9	19.2
3.0- 3.9	5.6	6.6	5.9
4.0- 4.9	3.3	1.4	3.0
5.0- 5.9	2.0	0.7	1.8
6.0- 6.9	0.5	0.7	0.5
7.0- 7.9	0.5	—	0.4
8.0- 8.9	0.2	—	0.1
9.0- 9.9	0.2	—	0.1
10.0-10.9	0.2	—	0.1
Number.....	633	151	784
Mean.....	1.73	1.46	1.68

Table 1 shows the amount of professional writing by individual psychologists in 1939. It will be seen from this table that approximately two-thirds of the psychologists who publish at all publish less than two full articles per year regardless of sex. The distributions of the male and female contributions are of the same general shape with the exception of the tail produced by the six men who published more than seven articles each. This holds true in spite of the fact that the women are outnumbered by the men 4.2 to 1 in this investigation. Although the mean number of publications per man (1.73) is slightly higher than that per woman (1.46), it seems

¹ This is one of a series of investigations on the professional problems of women in American psychology, conducted under the direction of Alice I. Bryan and Edwin G. Boring with financial assistance from the Committee on Graduate and Professional Training of the American Psychological Association.

reasonable to conclude that a publishing woman publishes as much as a publishing man. The difficulty for women seems to lie in getting over the publication threshold.

The classification of the accepted publications according to the fourteen divisions appearing on the cover of the *Psychological Abstracts* yielded the sort of information we expect from what we know about the interests and employment of male and female psychologists. Women are most often employed in school systems, clinics, guidance centers and custodial institutions. They tend, of course, to do most of their writing about problems related to their work. Consequently Childhood and Adolescence shows a very significant difference in favor of the women (C.R. = 4.73). The majority of men, on the other hand, were employed by colleges and universities, with school systems running a poor second. Their interests are more "scientific," if that term be used with the connotation given it by the physical sciences. The significant differences in favor of the men, therefore, appear in General (C.R. = 2.53), Motor and Glandular Responses (C.R. = 2.46), and Learning, Conditioning, and Intelligence (C.R. = 2.43).

The differences between the sexes in these four divisions are significant whether one considers the number of authors or the number of publications. If one considers only the number of publications, however, there are also significant differences in favor of the men in Psychoanalysis, Dreams and Hypnosis (C. R. = 2.50), and Receptive and Perceptual Processes (C. R. = 2.27). The differences appearing in the remaining eight divisions are due to the varying degrees of popularity of the subject-matter rather than to differences between the sexes.

Inquiry was made into the extent to which male and female psychologists specialize, i.e., confine their publications to one division. Since we know that most psychologists do not publish more than once a year (Table I), we are not surprised to learn that those people who contributed to more than one paper in 1939 represent only 44.3% of the publishing psychologists for that year. The results of this inquiry indicate that those women who contribute to more than one publication per year are slightly more specialized than their male counterparts, and that, regardless of sex, over half of those people who

participate in more than one publication per year spread their efforts over two or more divisions.

The outstanding fact obtained from the classification of publications according to type is that, regardless of sex, the majority of American psychologists who publish write articles. Although the differences are statistically insignificant, men write proportionately more monographs and comments than women; women write proportionately more books and reviews, and compose more bibliographies and tests, than men.

CONCLUSIONS

1. Males in 1939 were responsible for 83.6% of the publications by American psychologists. Women contributed only 16.4%.

2. Regardless of sex, approximately two-thirds of the American psychologists who published were responsible for less than two full articles per year.

3. American women psychologists who published, published as much as did men who published. Women seem to experience difficulty, however, in getting over the publication threshold.

4. Sex differences exist with respect to four of the fourteen accepted divisions of psychological literature whether one considers the number of authors or the number of publications. Childhood-and-adolescence was "feminine"; Learning-and-intelligence, General, and Motor-and-glandular-responses were "masculine."

5. Of those American psychologists who participated in the publication of more than one paper per year, more than half spread their efforts over two or more fields. The women in this category were slightly more specialized than the men.

6. The most usual type of publication was the article.

REFERENCES

1. BRYAN, A. I., and BORING, E. G. Women in American psychology: prolegomenon. *Psychol. Bull.*, 1944, **41**, 447-454.
2. BRYAN, A. I., and BORING, E. G. Women in American psychology: statistics from the OPP questionnaire. *Amer. Psychologist*, 1946, **1**, 71-79.
3. BRYAN, A. I., and BORING, E. G. Women in American psychology: factors affecting their professional careers. *Amer. Psychologist*, 1947, **2**, 3-20.

Received February 26, 1948

A BIBLIOGRAPHY ON CAREERS IN PSYCHOLOGY: II

GEORGE J. DUDYCHA

Ripon College

SINCE practically all of the occupational and professional material of interest to students of psychology and to counselors is published as journal articles on various, and often limited, aspects of the general problem, it is somewhat difficult for those students who are developing an interest in psychology to get an overall view of the occupational opportunities open to them and the professional training demanded of them. To make somewhat more certain that those who are interested will find the information they seek, the present writer has published a bibliography (19) of 157 titles that included publications that are occupationally and professionally significant. Since the appearance of this first bibliography, many additional articles have been published which are summarized and classified here.

A large number of the references listed here were published during 1947 or near the close of 1946. Of the 54 references, 4 appeared in January 1948, 37 in 1947, 12 in 1946, and 1 in 1945. Due to changes in editorial policy, THIS JOURNAL is now the best single source to consult for information of an occupational and professional nature. Prior to 1947, the *Journal of Consulting Psychology* was the best single source for information of this type.

Publications of General Interest. The future growth of psychology is discussed in an article by Wolfe (50). Several references of general interest discuss the status of psychology as a profession. Hilgard *et al.* (24) raise the question: Who is a psychologist? Armstrong (2) discusses the problem of defining the profession of psychology. Gregg *et al.* (22) inquire into the nature and range of psychology, the purposes of psychology in an ideal university, the prerequisites for serious students of the subject, and the value of psychology in the professional schools. The opportunities open to negroes in several fields of psychology are presented by Bayton (5). A general account of current trends in psychology is found in Dennis (17), and of current trends in experimental psychology in Skinner (45).

The School Counselor. The five basic vocational skills needed by counselors are discussed by Arnold (3). The role of the high school counselor, the

knowledge and skills he needs, his background training and other desirable qualifications are delineated by Super (47). Zeran (54) lists the responsibilities and duties of the counselor and discusses some of the guidance problems found in schools. A brief account of the nature of student counseling is presented by Williamson and Foley (49). Bell (6) gives the results of his survey of the types of counseling and guidance courses offered by graduate schools and the qualifications of the instructors. He also presents a list of graduate schools, according to geographic area, that grant master's and doctor's degrees with a major in guidance and counseling. The need for, and some of the problems involved in, the certification of counselors is the topic of Landy's (30) article.

Child Guidance. Fredericksen (21) presents the results of an extensive survey concerning the desirable qualifications for child welfare workers employed by public and private child welfare agencies in the various states. The article also presents some data on the number of people so employed and the median salary paid three years ago. Comments on undergraduate and graduate training are included. The data are based on questionnaire reports and are presented from the point of view of a social worker. A general account of the development and present status of child psychology may be found in Sears (43).

Clinical Psychology. Judging from the titles in this bibliography, psychologists are at present more concerned about clinical psychology than about any other field. Nineteen of the 54 titles listed here deal with clinical psychology. An excellent discussion of clinical psychology of interest to students is presented by Kelly (28). Some of the personal characteristics generally considered essential for clinical work are listed by Rosenzweig (41). He also discusses the clinical psychologist's outlook and the types of methods and procedures he employs. A general discussion of psychotherapy is found in Rogers (40). Hutt (26) presents an analysis of the duties performed by clinical psychologists in the army. Kelly (27) reports on a cooperative research

project, sponsored by the Department of Psychology at the University of Michigan, on the selection of clinical psychologists. Challman (13) gives an account of the cooperative organization and the clinical work done at the Winter VA Hospital, the Menninger Clinic and Foundation, and the University of Kansas. This article lists the psychologists employed, indicates their division of labor, lists the types of tests they employ, the facilities available, and the research projects in progress.

The relationship of the clinical psychologist to other professional workers is the subject of a number of articles. A somewhat general discussion of the relationship of psychology and psychiatry is presented by Menninger (35). Clark (15) writes from the point of view of the psychiatrist on the contributions of the psychologist and the psychiatrist. The contributions of the clinical psychologist to the physician are presented from the physician's point of view by Hawley (23). The role of the psychologist in the psychiatric hospital is presented by Cheney and Strongin (14), and in the VA mental hygiene clinic by Campbell (12).

Personnel Work. The reader who is interested in personnel work will find the two books written by Darley and Berdie (16) and by Smythe (46) particularly useful. The two chapters by Flanagan (20) and by Morgan (37) in a recent publication on trends in psychology are also excellent. What is expected of college-trained personnel workers has been gleaned by Yarborough (53) from a survey of 46 employers.

Market Research and Advertising. A discussion of the work of a research director in an advertising agency is found in Wulfeck (52). For an account of the sample interview survey see Likert (32). The reader will find an excellent general account of the various phases of advertising and of the opportunities in the field in Rivers (39). Students of psychology who are interested in market research will be particularly interested in Rivers' (39) chapter on this subject.

Training of Psychologists. One-half of the publications listed in this bibliography deal exclusively with, or touch on the subject of training. Students who are about to begin their graduate training in psychology will find the table (1) listing scholarships, fellowships, and assistantships offered by American universities and colleges very helpful. The undergraduate student who is planning his college course with the view of majoring in psychology will find the

suggestions given by Gregg *et al.* (22) instructive. Foreign language requirements for the PhD are discussed by Bird *et al.* (7).

The training of clinical psychologists is the subject of more articles than all the other fields taken together. The report on the conference, chairmanned by Kubie (29), deals with various aspects of the training of clinical psychologists. Likewise the committee report prepared by Shakow *et al.* (44) is very detailed and specific in its treatment of the problems of training clinical psychologists. Sears (42) lists the clinical training facilities available in American universities in 1947. His list includes 40 institutions that offer graduate training in clinical psychology and also indicates the extent to which each has met the 13 criteria on which institutions are judged. Institutions recommended for the VA clinical training program are marked. Internship training in clinical psychology is discussed by Dosier (18) and by Holzberg (25).

Two articles describe the cooperative program in clinical psychology sponsored by the Menninger Clinic and Foundation, the Winter VA Hospital and the University of Kansas. These are by Challman (13) and the Menninger Foundation (34). An excellent account of the VA clinical psychology program may be found in Morgan (38). The training program established by the Medical Department of the Army is outlined by Ullmann (48).

The training of personnel workers is discussed very adequately by Darley and Berdie (16) and by Smythe (46). The short-term training program in client-centered counseling given at the University of Chicago is outlined by Blocksma (9). Fredericksen (21) makes some comments on undergraduate and graduate training for child welfare workers in public and private agencies. The extra-psychological training considered essential for success in industrial psychology and other applied fields is discussed by McQuitty (33).

Certification and Placement. Some certification problems are discussed by Hilgard *et al.* (24). A general discussion concerning the certification of Canadian psychologists is found in Bott (10). Landy (30) presents the need for and some of the problems involved in the certification of counselors. A report on the APA placement activities was prepared by Ley (31).

Professional Ethics. Two articles present suggested codes of ethics for psychologists. The one for consulting psychologists was prepared by Bixler

and Seeman (8); the one for professional psychologists was formulated by the Minnesota Society for Applied Psychology (36).

Psychologists' Salaries. Trends in psychologists' salaries for 1940, 1944 and 1945 were studied by Wolfe (51). A survey of the 1945 salaries of 74 Connecticut psychologists was made by Burnham (11). Badger (4) reports on the 1946-1947 salaries of college teachers (including psychologists) of all ranks, types of institutions and geographical areas. Salary ranges for some positions are mentioned by Ley (31). Salary ranges for personnel workers are discussed by Darley and Berdie (16); those for child welfare workers are presented by Fredericksen (21), and those for clinical psychologists in the VA program are listed by Morgan (38).

REFERENCES

1. Anonymous. Stipends for graduate students in psychology and related fields. *Amer. Psychologist*, 1948, **3**, 20-29.
2. ARMSTRONG, CLAIRETTE P. On defining psychology as a profession. *Amer. Psychologist*, 1947, **2**, 446-448.
3. ARNOLD, D. L. Qualifications of a guidance counselor. *Purdue Univ. Stud. higher Educ.*, 1946, **55**, 8-19.
4. BADGER, H. G. Administrative policies governing the salaries of college teachers. *Bull. Amer. Assn. Univ. Professors*, 1947, **33**, 443-463.
5. BAYTON, J. A. Opportunities for Negroes in psychology. *Amer. Psychologist*, 1947, **2**, 207-208.
6. BELL, H. M. Analysis of summer courses for counselors. *Occupations*, 1948, **26**, 240-244.
7. BIRD, C., HERON, W. T., MEEHL, P. E. AND PATERSON, D. G. The foreign language requirement for the PhD. *Amer. Psychologist*, 1947, **2**, 136-138.
8. BIXLER, R. AND SEEMAN, J. Suggestions for a code of ethics for consulting psychologists. *J. abnorm. soc. Psychol.*, 1946, **41**, 486-490.
9. BLOCKSMA, D. D. AND PORTER, E. H., JR. A short-term training program in client-centered counseling. *J. consult. Psychol.*, 1947, **11**, 55-60.
10. BOTT, E. A. Problems in the certification of psychologists. *Canad. J. Psychol.*, 1947, **1**, 3-13.
11. BURNHAM, P. S. Connecticut psychologists survey their 1945 earnings. *Sch. & Soc.*, 1947, **65**, 107-110.
12. CAMPBELL, H. M. The role of the clinical psychologist in Veterans Administration mental hygiene clinic. *J. clin. Psychol.*, 1947, **3**, 15-21.
13. CHALLMAN, R. C. The clinical psychology program at Winter V. A. hospital, the Menninger Foundation, and the University of Kansas. *J. clin. Psychol.*, 1947, **3**, 21-28.
14. CHENEY, C. O. AND STRONGIN, E. I. The psychologist's contribution to the psychiatric hospital. *Amer. J. Psychiat.*, 1946, **103**, 65-68.
15. CLARK, R. A. Psychologist and psychiatrist. *J. Personality*, 1946, **15**, 101-104.
16. DARLEY, J. G. AND BERDIE, R. F. *The fields of personnel work*. (2nd Ed.) Chicago: Science Research Associates, Monograph Number 70, 1946.
17. DENNIS, W. Psychology as a profession. In Dennis, W., et al., *Current trends in psychology*. Pittsburgh: Univ. of Pittsburgh Press, 1947. Pp. 1-15.
18. DOSIER, C. Report of roundtable on internship and training of clinical psychologists. *J. clin. Psychol.*, 1947, **3**, 184-190.
19. DUDYCHA, G. J., A bibliography on careers in psychology. *Amer. Psychologist*, 1947, **2**, 376-383.
20. FLANAGAN, J. C. Personnel psychology. In Dennis, W., et al., *Current trends in psychology*. Pittsburgh: Univ. of Pittsburgh Press, 1947. Pp. 138-168.
21. FREDERICKSEN, H. H. Desirable qualifications for child welfare work as recommended by public and private child welfare agencies, *Soc. Serv. Rev.*, 1946, **20**, 198-206.
22. GREGG, A., et al. *The place of psychology in an ideal university*. Cambridge: Harvard Univ. Press, 1947.
23. HAWLEY, P. R. The importance of clinical psychology in a complete medical program. *J. consult. Psychol.*, 1946, **10**, 292-300.
24. HILGARD, E. R., et al. Annual report of the Policy and Planning Board of the American Psychological Association: 1947. *Amer. Psychologist*, 1947, **2**, 191-198.
25. HOLZBERG, J. D. A practical program of in-service training for military clinical psychologists. *J. clin. Psychol.*, 1946, **2**, 341-347.
26. HUTT, M. L. An analysis of duties performed by clinical psychologists in the army. *Amer. Psychologist*, 1947, **2**, 52-56.
27. KELLY, E. L. Research on the selection of clinical psychologists. *J. clin. Psychol.*, 1947, **3**, 39-42.
28. KELLY, E. L. Clinical psychology. In Dennis, W., et al., *Current trends in psychology*. Pittsburgh: Univ. of Pittsburgh Press, 1947. Pp. 75-108.
29. KUBIE, L. S. *Training in clinical psychology*. New York: Josiah Macy, Jr. Foundation, 1947.
30. LANDY, E. Certification of counselors. *Occupations*, 1948, **26**, 249-250.
31. LEY, ENID S. Personnel placement activities of the APA; report for the year 1946. *Amer. Psychologist*, 1947, **2**, 213-215.
32. LIKERT, R. The sample interview survey. In Dennis, W., et al., *Current trends in psychology*. Pittsburgh: Univ. of Pittsburgh Press, 1947. Pp. 196-225.
33. MCQUITTY, L. L. Developing applied psychologists. *Amer. Psychologist*, 1948, **3**, 16-19.
34. Menninger Foundation. The Menninger Foundation School of Clinical Psychology: an experiment. *Bull. Menninger Clin.*, 1947, **11**, 109-140.
35. MENNINGER, K. A. Psychology and psychiatry. *Amer. Psychologist*, 1947, **2**, 139-140.
36. Minnesota Society for Applied Psychology. A proposal for a code of ethics for professional psychologists. *Amer. Psychologist*, 1947, **2**, 246.
37. MORGAN, C. T. Human engineering. In Dennis, W., et al., *Current trends in psychology*. Pittsburgh: Univ. of Pittsburgh Press, 1947. Pp. 169-195.

38. MORGAN, JANE D. Training clinical psychologists in the Veterans Administration. *J. clin. Psychol.*, 1947, **3**, 28-33.
39. RIVERS, D. *Your career in advertising*. New York: Dutton, 1947.
40. ROGERS, C. R. Psychotherapy. In Dennis, W., et al., *Current trends in psychology*. Pittsburgh: Univ. of Pittsburgh Press, 1947. Pp. 109-137.
41. ROSENZWEIG, S. Clinical psychology as a psychodiagnostic art. *J. Personality*, 1946, **15**, 94-100.
42. SEARS, R. R. Clinical training facilities: 1947. *Amer. Psychologist*, 1947, **2**, 199-205.
43. SEARS, R. R. Child psychology. In Dennis, W., et al., *Current trends in psychology*. Pittsburgh: Univ. of Pittsburgh Press, 1947. Pp. 50-74.
44. SHAKOW, D., et al. Recommended graduate training program in clinical psychology. *Amer. Psychologist*, 1947, **2**, 539-558.
45. SKINNER, B. F. Experimental psychology. In Dennis, W., et al., *Current trends in psychology*. Pittsburgh: Univ. of Pittsburgh Press, 1947. Pp. 16-49.
46. SMYTHE, D. M. *Careers in personnel work*. New York: Dutton, 1946.
47. SUPER, D. E. Basic problems in the training of high school counselors. *Teach. Coll. Rec.*, 1947, **48**, 384-390.
48. ULLMANN, C. A. The training of clinical psychologists. *Amer. Psychologist*, 1947, **2**, 173-175.
49. WILLIAMSON, E. G. AND FOLEY, J. D. Counseling in student personnel work. In Harriman, P. L., (Ed.), *Encycl. of Psychol.* New York: Philosophical Library, 1946. Pp. 104-110.
50. WOLFLE, D. Annual report of the executive secretary: 1947. *Amer. Psychologist*, 1947, **2**, 516-520.
51. WOLFLE, HELEN. Psychologists' finances. *Amer. Psychologist*, 1947, **2**, 236-238.
52. WULFECK, W. H. The role of the psychologist in market and advertising research. *J. appl. Psychol.*, 1945, **28**, 95-102.
53. YARBOROUGH, J. V. What industry expects of college-trained personnel workers and what colleges are doing in personnel work. *Tex. personnel Rev.*, 1946, **5**, 62-65.
54. ZERAN, F. R. Professional guidance training as an element in providing educational opportunities. *Sch. Life*, 1947, **29** (4), 9-12.

Received February 2, 1948

Comment

Contemporary American and British Psychological Scenes

To the Editor:

I do not feel entitled to express any very definite views on American psychology as a result of my last year's visit. A spectator may see more of the game than does a player, but I doubt if someone who catches sight of a game from the window of a passing train would qualify as a spectator. Another difficulty is that, since I was in America, I have seen Sir Frederick Bartlett's account of his own earlier visit, and I have had an opportunity of hearing Dr. Langfeld give a brilliant survey of contemporary American psychology at the International Congress. In spite of this my impressions last September were very vivid, and I shall try to recall them. I hope you will find these random notes of interest.

Quite early during the Detroit meeting I found myself adopting a partisan attitude. I had been sampling the papers in a more or less random way, and it seemed that there were at least two kinds of psychologist taking part. With one kind I felt quite at home—not that I was hearing something I knew already, indeed I was greatly impressed by the quality and quantity of the work that seemed to be going on—but both the speakers and those taking part in the discussions seemed to be working on the sort of problems that interested me. In some of the other meetings I felt more of an alien. The crowded sessions on clinical topics dismayed me, and I must confess that where I felt competent to criticise, it seemed that a good deal of rather fluent verbalization was going on. My first definite impression was that “real” psychology was being overwhelmed by a militant, politically conscious swarm of clinicians.

As the meeting progressed and I got to know more people, my first impressions were modified in several ways. First of all I discovered that at least some of the clinicians were first rate psychologists in my more traditional sense as well. They were not interlopers, and certainly not all politicians. I heard something too of the efforts being made to work out a training scheme for clinical psychologists, and found nothing there to suggest that an attempt was being made to cash in on a temporary sellers' market. At the end of it all I was not quite sure what to think.

After Detroit I visited a number of laboratories where I was most kindly received. Here again, and I am not talking only of Harvard, it seemed that there were at least two kinds of psychologist and that the differences between them were much greater than those between either of them and scientists in the adjoining fields of physiology on the one hand and sociology on the other.

It is much easier for an outsider to notice this kind of

thing—for instance in the course of one day I visited the laboratory of Tufts College, where I saw the complicated and ingenious apparatus used by Drs. Travis and Kennedy in their study of vigilance, and spent an hour with the Centre for Group Dynamics at the Massachusetts Institute of Technology. As a result, when I came to visit Harvard, the arrangement there seemed quite a reasonable one.

Later at Princeton I felt that something might still be done to hold psychology together. In particular I was very much impressed by a set of demonstrations that Hadley Cantril had rigged up, following the instructions of Dr. Ames. The way in which they related visual perception to action may have relevance to a wide range of problems, and I can see them playing a part in a whole range of investigations from social psychology to a study of brain function.

Those are some of my impressions, and as you see they do not add up to anything very definite. A lot of trouble might well be saved if the word “psychology” were used less widely. Social biology is a useful term for part of the field, and indeed the Harvard people already talk about social relations. Another name might be found for the clinician. After all the physician does not call himself a clinical physiologist. Perhaps when the new training scheme has been fully worked out the medical-nonmedical dichotomy will have disappeared, and the word “psychiatry” may cover both. But that consummation will take some time I should say.

JAMES DREVER, JR.
University of Edinburgh

To the Editor:

Thanks to the generosity of your Association, I have been able to visit many psychological departments in the Eastern half of your country, as you know, a privilege capped by the invitation to lecture at the University of Chicago, a blessing and boon I am now enjoying. I doubt, however, whether this really fits me any the better to discuss the current trends in psychology here, in comparison with those in Great Britain, for gratitude and loyalty are scarcely the best of companions for soundness of judgment, or for an unflinching critical regard.

However, it would be a mistake to think that psychology here and in Great Britain is much the same kind of thing. There is a vast enthusiasm for psychology here, and a jostling delight and novelty in the subject, that is totally lacking in the Isles. I need scarcely say that psychology is already part of your general culture whereas nothing of the kind has even begun to happen in Britain. Our respective universities are not even

interested in the same kind of subject matter: there is nothing in British psychology, for example, to compare with your preoccupation with theories of learning, with conditioning, with rat colonies and comparative psychology, or with the wide ramifications of mental tests and student counseling. Your teaching in psychology is in many ways more comprehensive than we in Britain can ever hope to make it: not only do you teach more, but you have more to teach. It is true that the visitor is apt to think that you spoon-feed your students. Your PhD, for example, is a glorified hamburger indeed in comparison with the hard and dry crust that we offer to the PhD student in Great Britain.

We assume in the Isles, perhaps, a more scholarly attachment to our subject. The great names of Hobbes, Locke, Hume, Berkeley, Hartley, the Mills, and Bain, and subsequently Galton, Pearson, Stout, and Spearman, still matter in England; and Scotland is just as proudly insinuating about its Reid, its Dugald Stewart, Brown, and Hamilton. The learned treatises from Britain, in recent decades, bear witness to these influences. In the case of Scotland, for example, perhaps the one imposing book of the past few decades is Drever's *Instinct*; and does it not breathe the very air of Dugald Stewart? And isn't it rumoured that Sir Cyril Burt sleeps with volumes of Mills under his pillow? In any case, his *Factors of the Mind*, Spearman's *Nature of Intelligence*, and Stout's *Analytical Psychology* are steeped deeply in the learning of these great historical names in psychology. Bartlett's *Remembering*, too, is redolent of the images and ghost of Berkeley. But something of this same historical nostalgia is felt throughout British psychology. Only Professor Pear's voice cries in these cultured fields for studies on such intriguing matters as the social psychology of cosmetics, dishwashing and the like. The philosophers in Britain, of course, won't let these great historical names rest; and, whatever the reason, psychology hasn't really broken with philosophy in Britain. But it is this that gives the Isles something of their archaic, but richly flavoured quality in matters psychological.

Clearly, then, the scenes here and in Britain are distinguishable. Even within the British Isles, of course, there are differences, just as there are here in America. The Scots, for example, are much more coherent and more generous about psychology than we are in England. You have probably heard, for example, about the project, under way, to test the I.Q. in some degree of every child of a particular age range in all Scotland: the fact that every psychological and educational department, and almost every school, is directly or indirectly involved in the scheme, is sufficient evidence, I think, of this cohesion and friendly cooperativeness in Scotland. Moreover, if one brings to mind the Scotch psychologist, cold in his kilts, and Binet-Simon in his sporan, waiting on the

mainland at Murrandrillochit, anxiously scanning the sunlit western sea, waiting for the annual arrival of a lonely crofter's child from the almost inaccessible Isle of Lona-madrummoch, little more need be said about this cohesion, not to mention the pride in her kith to which it is attributable. But it is to Professor Thomson at Edinburgh, perhaps, that most that is scholarly, generous, and thorough, colours the contemporary Scottish scene.

In comparison, of course, the Irish lie wholly and totally befogged, fallow and becalmed. Few there, if any, even know the word psychology, confusing it with fishing or something of the kind, for which they are to be forgiven, for the fishing is very good indeed in Connemara. And we English? Only a thoroughly intuitive extravert of an Englishman could dare to appraise the English scene. But we are not, I hope, negligible. The psychological laboratory at Cambridge is surely second to none in the world. And Oxford University, traditionally the home of lost causes, has at last been very generous to psychology: it is too soon to speak of its effects, but a new Honour School of Psychology, Philosophy, and Physiology, backed by all that Oxford has to offer of prestige and rich collegiate life, will make itself increasingly felt. The combination of psychology and philosophy in one Honour School, in particular, which is so much favoured by the Heads of the Oxford Colleges, will be watched with the greatest of interest: not only does it afford another illustration of the historical nostalgia to which I have drawn attention, and to a scholarly purpose in English psychology, but, of course, it is meant to mark the School sharply from the more empirically orientated Cambridge. America, if I am not mistaken, could do with at least a flavour and seasoning of this same philosophical and scholarly interest, and I hope that every opportunity will be taken to see that a fair proportion of your Rhodes Scholars enter this School at Oxford, to sip at Corpus Christi, perhaps, or at Brasenose, or Christ Church, the portly wine and the glinting sherry of discourse, as was done by Locke, by Titchener, Stout, and McDougall, and more recently by Wm. Brown, Flugel, and Burt. As for London, the psychological departments there have to overcome physical difficulties comparable with those in the universities of Germany. But the birthplace of factorial analysis, used by the Spearman school to prop and support a broad historical sweep of psychology, is surely to be more than an Elysian field for the ghosts of Galton, Pearson, Spearman, and Myers. These stood for the essential spirit of science: one might expect London to be less the victim of historically-rooted value systems, such as penetrate, however subtly, through the ancient Scotch universities, and at Oxford and Cambridge. Nor could we leave London without making mention of the Tavistock Institute of Human Relations: this would not

wish to pretend that it is cast in the classical mould of the great names I have just mentioned—indeed it rather prides itself in not being scientific at present, and it is not quite sure that it wishes to be so in the future—but it is enthusiastically alive, and, if anything, is London's psychological showpiece at the moment.

All these English developments and trends, nevertheless, do not add up to the friendly and enthusiastic milieu that is so characteristic of American psychology. English psychology is perhaps a little at odds with itself, a thing of bits and pieces. It is not ungracious, but it is a little ungenerous in its institutions: the social distance from Oxford and Cambridge on the one side to London and the Provinces on the other is a mighty long way, and this has a deep, and inevitably a disruptive, effect upon the psychological scene in England. There is nothing quite like this in either Scotland or in America.

Against this background, then, is there anything I dare sing about the American scene, other than the laudatory? Your psychology, in its institutions, outlook, and social position, has achieved a majority, and maturity, never before even remotely aspired to anywhere or at any time in history. The infiltration into it of the British nostalgia for scholarship and history would, I think, enrich and broaden the undergraduate education of your young psychologists; but heaven forbid that the irrational value-systems that go with it are ever allowed to influence your American way of things psychological. The future is surely with the Lasleys, Hulls, and Thurstones, if not with the Kinseys. Social psychology, of course, has become something of a fashion, but it is a sign of the strength of your psychology, I fancy, that the ablest young brains are taking hold of this, the newest of the psychologies.

And, if I may drop from this high plane, I confess that it has been a particular delight to read, for the first time (for many of your journals must have reached the depths of the Atlantic during the war), some papers on methodology in psychology, on operationism, the concept of interactionism, the environmental probability notions of Brunswik, and on the applications of Fisherian factorial design to experiments in psychology. Fisher's work is more widely known here than in psychological circles in Britain. Your intense interest in clinical psychology, which so bothered my distinguished friend from Cambridge, I see in a rather different light: I feel that the forthcoming symposium on testing and statistical methods in the field of clinical psychology (to be held at Cleveland in December, under the auspices of your Statistical Society), is so much to the point that all must be fair and promising in this field. Perhaps a rather less naive and narrow regard of tests, however, and a greater eclecticism in the psychotherapies, is called for in this part of the American scene.

It has become commonplace to say that your students

are over-taught, over lectured-at. I am now a little sceptical about this. After all, you have much to lecture about. And I can find no evidence that your students, on this account, are unable to think for themselves: on the contrary, more sound projects for PhD researches have been brought to me by graduates here in Chicago than ever I have had from students in England. I confess, moreover, to a high regard for non-directional techniques in seminars and colloquies, and although I suspect that they induce a certain verbosity, of almost inflationary dimensions, the intentions are healthy, and the cost of better understanding is not, as yet, too high.

I like the stand taken, too, for giving some distinctive professional training to the PhD student. But too much specialisation, I think, would be a mistake. It should be possible to give a great deal of common ground to all PhD students, so that, by adding just a little more to the well-trained (and well-chosen) trainee, he could be made (or could make himself) into a highly useful clinical, or social, or educational, or industrial, or any other psychologist, or all of these at once. The essence as well as the core of professional training should, I think, be techniques and theories common to all the applied psychologies, rather than intensive training to the point of perfection in any specialty. This means, no doubt, closer attention to general theories which underlie the techniques. Thus, the study of personality and mental testing is pretty well common to all the applied psychologies; and it therefore seems a pity that factor-analysts on the one hand, and idiographists and ego-structuralists on the other, are represented at present as in warring camps. There is surely a body of highly significant theory here, supporting techniques of considerable penetration, which requires calm presentation to all applied psychologists. But similarly for much else. Methodology should be studied on its own account, and sensible applied statistics, together with firmly based studies of the major applied techniques, all need bringing to heel for the ready understanding of every brand of budding applied psychologist. Overspecialisation, like skill at billiards, should be regarded as a sign of a mis-spent youth.

None of these remarks, however, really touch the heart of psychology in America. Your journals, in their vertiginous abundance, if I might borrow the words from Jung, illustrate very well a trend for which I feel a natural rapport, but against which I have tried a little to fight shy. I refer to the typical extraverted thinking, that, brought face to face with facts, cannot see wood for trees, which characterises many of the articles in these journals, and which is perhaps no less characteristic of your psychology in general. This is perhaps naughty, and an unfair thing to say. But I recently had occasion to read some twenty articles on fatigue and related matters, in the Library of Congress at Washington, fruits of

much work by your psychologists during the war, and all of it put together gave me less insight than a single brief article by an English psychologist, facing the self-same questions, during the same war. As Jung put it in his now little-read *Psychological Types*, when extraverted thinking is subordinate to objective data, it loses itself. There is, if I may say so with some uneasiness, something of this underneath the enthusiasm and jostling friendliness that is so engrossing a feature of your psychological scene. All of which may seem to reinforce the suggestion that a little more introversion, in the way of a nostalgia for great historical names and theoretical preoccupations, might have been helpful in the early education of your

psychologists. But the mood of your psychology is inevitably a reflection of the culture in which you live; and yours in America is not apt to idolize fatherly figures, so that your psychology will remain extraverted, willy-nilly. I like it that way. Meanwhile British psychology will continue to look back over its shoulder at the ghosts of the great names: you see, we in Britain are not so free of, or with, our fathers, and the poet, if no other, can perhaps discern along with our affected scholarliness, a certain awe, something of gentle guilt and furtiveness in our backward glances. In short, we are not quite grown up.

WILLIAM STEPHENSON
University of Chicago

Listing of Professional Psychologists in the Classified Telephone Directory

To the Editor:

In view of attention given recently to the subject of "The Public and Psychology" in the *American Psychologist*, and particularly the article, "Private Clinicians in Los Angeles," published in the April number, it may interest readers to know of one new development in the Los Angeles area. Members of the Committee on Public Relations of the Southern California Psychological Association met with representatives of the Pacific Telephone and Telegraph Company to investigate the feasibility and desirability of members of the association who accept private practice being listed together as such in the Classified Telephone Directory. The plan was presented to the Association at a meeting in February. Following approval by the Association, a small committee was appointed to prepare a suitable emblem as required for group professional listings, to contact members who accept private practice and who desired to be listed, to arrange for uniform terminology, and to work out details with the telephone company.

As a result of this action, the June, 1948 edition of the Los Angeles Classified Directory carried the following listing under the general heading, "Psychologists."

SOUTHERN CALIFORNIA PSYCHOLOGICAL ASSOCIATION

An association of qualified professional Psychologists, Ph.D., organized to maintain high standards and to promote ethical practices in Psychology.

"WHERE TO CALL" MEMBERS

An emblem, circular in form with the letter ψ in the center and the words "Southern California Psychological Association," appears at the right of the above legend.

Beneath the legend appear the names of fifteen mem-

bers who asked to be thus listed and who agreed to share with the Association the expense of this group listing. Fields of specialization were given as follows:

Clinical psychology (without any other area specified)	3
Testing-Clinical Psychology-Child Psychology	1
Clinical Psychology and Child Psychology	1
Clinical Psychology, Psychodiagnostic Testing	1
Counseling-Clinical Psychology	1
Industrial Psychologist	1
Business and Industrial Psychology	1
Vocational Psychology-Test Construction	1
Psychological Counseling	1
Psychological Counseling-Family Relations	1
"Referrals Only" (No area specified)	3

A survey of the classified telephone directories of the twenty largest cities (see the *American Psychologist*, June 1948, p. 206) indicates that this is the only such professional listing of psychologists in the United States. It corresponds, in the Los Angeles directory, in a small way to the listing of members of the Los Angeles County Medical Association.

It is to be observed that the total number of fifteen is small as compared to the ninety-one psychologists or psychological agencies listed under "Psychologists" in the same directory. Among explanations of this fact are the following: (1) most of the "psychologists" whose names appear in the directory are not members of the Southern California Psychological Association and are probably ineligible for membership, since a Ph.D. is one of the requirements; (2) the Association did not extend to its affiliates the privilege of being included in the group listing; (3) several members of the Association live outside the Los Angeles area and were not interested in a Los Angeles listing; (4) some members accept private practice in their homes and do not have a business telephone as

required by the telephone company for inclusion in the Classified Directory; (5) some members give their chief attention to teaching and in view of the fact that they devote only a small portion of their time to private practice did not desire to be listed; and (6) a few qualified

professional psychologists in the area have not applied for membership in the association as yet.

J. A. MORRIS KIMBER

Chairman of Committee on Roster

Southern California Psychological Association

Professional Ethics for Women Psychologists

To the Editor:

Certain problems of professional ethics arising in connection with the employment of women psychologists have recently come within my personal experience.

In the past two years I have received six job offers. Of these, one was a good position which I could not accept for geographical reasons, one involved low pay for work for which I am not specially competent, and the remaining four involved compensation in whole or in part by what the King of Barataria called "the culminating pleasure that we treasure beyond measure, the gratifying feeling that our duty has been done." The last four employers were two university departments, an organization of psychologists, and a government agency. Is it unpatriotic for a woman to ask "a day's wage for a day's work"?

In one case the employer frankly wished to use me as an alternative to hiring a man at a decent salary.

While the employers pretend to believe that a woman's professional motivation is much more disinterested than a man's, they also reveal a more realistic attitude. One way or another, the hint is likely to be made: If you ever wish us to offer you a good job, you had better work for us now for nothing, or for whatever we offer.

First, note the fact that a married woman has lost most of her bargaining power if she is unwilling to move her residence to take advantage of the best offer. Next, note the anti-nepotism rule which affects wives of instructors in many universities. This rule is apparently intended to rescue administrators from the pressure toward hiring incompetents, but it can hardly achieve that end. Its result is rather that the faculty wife who is given a mar-

ginal job is expected to feel indebted to the university for the opportunity to serve.

The employer who exploits the married woman's handicap by offering her a job whose salary is clearly incommensurate with her skills and services presents her with a difficult decision: Will the employer really feel indebted to her and be more disposed to give her an adequate job later? Or will he feel that since her services can be had cheaply, it would be needless extravagance to pay her adequately?

When a woman accepts such a job, she may be playing the role called, in other contexts, a "scab." It is an economic fact that a cheap labor source tends ultimately to lower the standards of pay for the whole group, favored and unfavored alike.

On the other hand, every woman has an obligation both to society and to other women to use the skills she has achieved. One male psychology professor has reminded me that when the question comes up of awarding a graduate assistantship to a woman, every woman who has left the profession to raise a family after receiving a PhD degree is used as an argument against the award.

No individual woman can do much to solve the ethical and practical problems raised here. Each employer can contribute to the solution of the problems by not offering salaries to women that he would be ashamed to offer to men of the same skills and for the same services. Another constructive solution is the provision of a variety of respectable parttime jobs. An individual employer cannot undertake this task. It is properly the concern of the profession as a whole.

JANE LOEVINGER

Washington University School of Medicine

Notehand for Psychologists: Further Comment

To the Editor:

Professor Wells (6) has suggested Speedwriting and the Phillips Code as foundations for notehand systems adapted to typescript in contrast to Professor Taylor's system of notehand (4). Possibly Speedwriting or the Phillips Code is preferable for one who is writing so much that the extra time required in learning makes little difference; but for those psychologists, psychology students and others who do not want to spend so much time in such learning, Professor Taylor's notehand seems more

suitable, especially if somewhat modified. This will be pointed out in the discussion and examples which follow.

Speedwriting, the Phillips Code and Professor Taylor's notehand (hereafter simply "notehand") are all relatively easy to learn, permit almost verbatim recording and consequently make possible easy recall even after a long lapse of time. Slight changes in notehand would make it as well as the other two suitable for both writing and typing. Notehand has the additional advantage, however, of greatest ease of learning and therefore also of

communication to others who have only very slight acquaintance with the system. As Professor Taylor rightly says, "What is needed is a system of abbreviations which can be learned easily and can be read by anyone with a list or with a little practice" (4).

It takes considerable practice to master the Phillips Code (3) with its long list of abbreviated words and Speedwriting (1) with its system of equivalent letters or other symbols for the usual English letter combinations; while notehand with its limited though expandable list of words abbreviated, is based on a few simple rules: (1) Every word abbreviated is either the first letter or letters, or the first letter and other characteristic letters, with only seventeen exceptions, of which seven are conventional symbols given in dictionaries. (2) A word whose abbreviation is a word is followed by a period. (3) First letters of nouns are capitalized. (4) Proper nouns are underlined. (5) Institutional structures and blood kin are encircled. (6) An apostrophe within an abbreviation indicates omission of letters (this is applied to few abbreviations). (7) The first word of a sentence is written out in full.

A few modifications of these rules render the system practical for typing as well as writing by hand: (1) (Referring to rule 1): Use v instead of √ for "of," ∴ instead of ∴ for "therefore," and pgf instead of ¶ for "paragraph." (4) Do not underline proper nouns. (5) Do not encircle institutional structures and blood kin.

Other modifications might be made, not for typing but merely for simplification. (3) It is difficult to see the value of capitalizing the first letters of nouns, so lower case might well be used. To avoid the few identical abbreviations which might result from this change, different characteristic letters may be retained in the abbreviation. For example, instead of Sc = science, sc = scientific and Sc't = scientist, substitute sci = science scic = scientific and scit = scientist. This leaves sc = schizophrenia and scc = schizophrenic (not in the notehand list), which incidentally conform to Sc as used for the schizophrenia scale of the Minnesota Multiphasic Personality Inventory; thus helping to standardize abbreviations within the psychological profession. (6) The necessity for an apostrophe within an abbreviation can be obviated by retaining distinctive letters. Rules (2) and (7) offer no particular difficulty.

Although the most frequent ten or twenty words in general writing (2) are short anyway, others of Melvil Dewey's abbreviations could be incorporated even when they violate a rule: t = to, too; b = be, been; h = has, have; z = is, as; and e = the (easier to write than "t" of notehand).

To evaluate adequately the various systems, experimentation is of course needed, but at least certain judgments can be tentatively made. Basis for them is shown

in the examples below which were selected to illustrate some of the principles of the different systems.¹

It is surprising, in view of the emphasis on typing and outlining as writing and notetaking tools in the secondary schools, that so important a technique as notehand has not been widely taught, at least in college preparatory courses. But if the secondary schools have missed an opportunity here, have not also many college psychology courses which devote some time to topics such as learning and study habits?

UNABBREVIATED	PHILLIPS CODE	SPEED- WRITING	NOTEHAND (TAYLOR)	NOTEHAND (SEYMOUR)
aggressive.....	agv	Agsv	agg've*	aggv
anything.....	ayg	n,g	athg	athg
author.....	au	A	Au	au
determine.....	dtm	Dm	det	det
determined.....	dtmd	Dm	detd	detd
develop.....	dvp	dvp	dev	dev
development.....	dvp ^m	dvp-	devt*	devm
discriminate.....	dkm	dskm;	discrim	discr
intelligent.....	ijt	Nj	intel't	intgt
physical.....	phl	fsK	phy'l	phsl
politics.....	plx	plTs	Pol	pol
position.....	pon	psj	Pos'n	posn
relation.....	rln	rlj	Rel	reln
sufficient.....	suf	sfj/	sufft	suft
understand.....	uk	Us-	ustd	und

* Not given in source; derived according to principles of the system.

REFERENCES

1. DEARBORN, E. B. *Speedwriting: the natural shorthand*. New York: School of Speedwriting, Inc., 1937.
2. DEWEY, MELVIL. Office efficiency. In H. P. Dunham (Ed.), *The business of insurance*. New York: Ronald Press, 1912, vol. 3, 272-316 (includes one hundred notehand breves).
3. PHILLIPS, W. P. *The Phillips code*. New York: Telephone and Telegraph Age, 1914. Revised.
4. TAYLOR, W. S. Notehand for psychologists. *Amer. Psychologist*, 1947, 2, 106-108.
5. TAYLOR, W. S. Notehand for psychologists. (Northampton, Mass.: 1947), mimeo.
6. WELLS, F. L. Professor Taylor and the problem of notehand. *Amer. Psychologist*, 1947, 2, 525-527.

RICHARD B. SEYMOUR
University of California, Berkeley

¹ I have compiled a list of abbreviations of about 375 basic words (and forms derived from them) in psychological writing, most of which appear in Warren's *Dictionary of Psychology*; they were selected on the basis of (admittedly subjective) judgment of (1) frequency of occurrence and (2) length of word as justifying abbreviation. This list may be secured by sending 15 cents (stamps acceptable), to the author at the Dept. of Psychology, University of California, Berkeley 4, California.

Advantages of a College Education

To the Editor:

The data for the enclosed item were contributed by one of our counselors and promptly published in a daily column (It's News to Me, by Herb Caen) of the San Francisco Chronicle. Transcription from the original announcements is correct except that the required experience is as clinical psychologist in a psychiatric agency.

THESE FOOLISH THINGS:

The advantages of a college education are obvious. For instance, the S. F. Civil Service Commission recently announced that applications are being accepted for a couple of jobs in the City Govt. The first opening is for

a Senior Psychologist. Minimum requirements for this post are a Master's Degree in Psychology, PLUS one year's experience as a clinical psychiatrist, OR an additional degree of Doctor of Philosophy. Salary: \$350-420. The second opening is for the job of Inspector of Horses and Equipment in the Police Dept. The minimum requirements for this one are even more stringent, and I quote: "One year's paid experience supervising or assisting in supervising a large stable . . . or two years' experience in the training of horses and instructing in horsemanship." Salary: \$372-\$444.

MARIAN R. BALLIN

Veterans Counseling Center, San Francisco

Ethics in Experimenter-Subject Relationships

To the Editor:

Every student of clinical psychology is expected to learn and to adopt certain ethical principles which will govern his relationships with persons who come to him for help. A Committee on Precautions in Animal Experimentation exists as a constant reminder to the animal psychologist of his humane obligations. However, the experimental psychologists who employ human subjects appear to have paid little formal attention to the problems of ethics which confront them in their relations with these subjects. Such problems arise in the use of procedures dangerous to life or physical health, procedures which produce panic, extreme frustration, or other strong emotional effects, and procedures which involve deceiving the subject on points of fact

concerning the experiment or concerning things beyond the experiment itself. The published literature offers instances of a possibly questionable nature in each of these three classes; although experiments of a physically dangerous kind are undoubtedly rare, various amounts and degrees of frustration, invidious comparison against "norms," deception in great variety, etc., are far from uncommon. The question arises whether example and good sense are now sufficient, with the present extension of experimental method to the study of every phase of personality, or whether the determination of what is "questionable" should not be guided by an explicitly formulated code of ethics for the experimentalist.

FRANCIS W. IRWIN

University of Pennsylvania

Student Affiliate Page

REPORT OF THE STUDENT AFFILIATE SESSION AT THE EPA MEETING

A special informal session for the Student Affiliates was held at the EPA meeting on April 16th at Temple University, Philadelphia, with about thirty students in attendance. Opportunity was provided for the interchange of ideas—particularly ideas relating to research—between students with similar interests, and for the elicitation of suggestions for the guidance of the Committee on Student Affiliates in gearing its activities to the needs of the students. Walter C. Shipley was chairman.

STUDENT AFFILIATE MEETING AT BOSTON

A student affiliate meeting was held at the annual meeting of the American Psychological Association, at the Hotel Statler in Boston, Sept. 9, 1948, with Chairman Francis P. Robinson of the APA Committee on Student Affiliates presiding, and two other APA members of the committee, Walter C. Shipley and Robert L. Thorndike, present. Approximately 30 students—most of them affiliates—attended. Something over 16 institutions covering a wide geographical range which included Tulane University, the University of Alabama, the University of Omaha, and Loyola University, as well as others nearer to Boston, were represented.

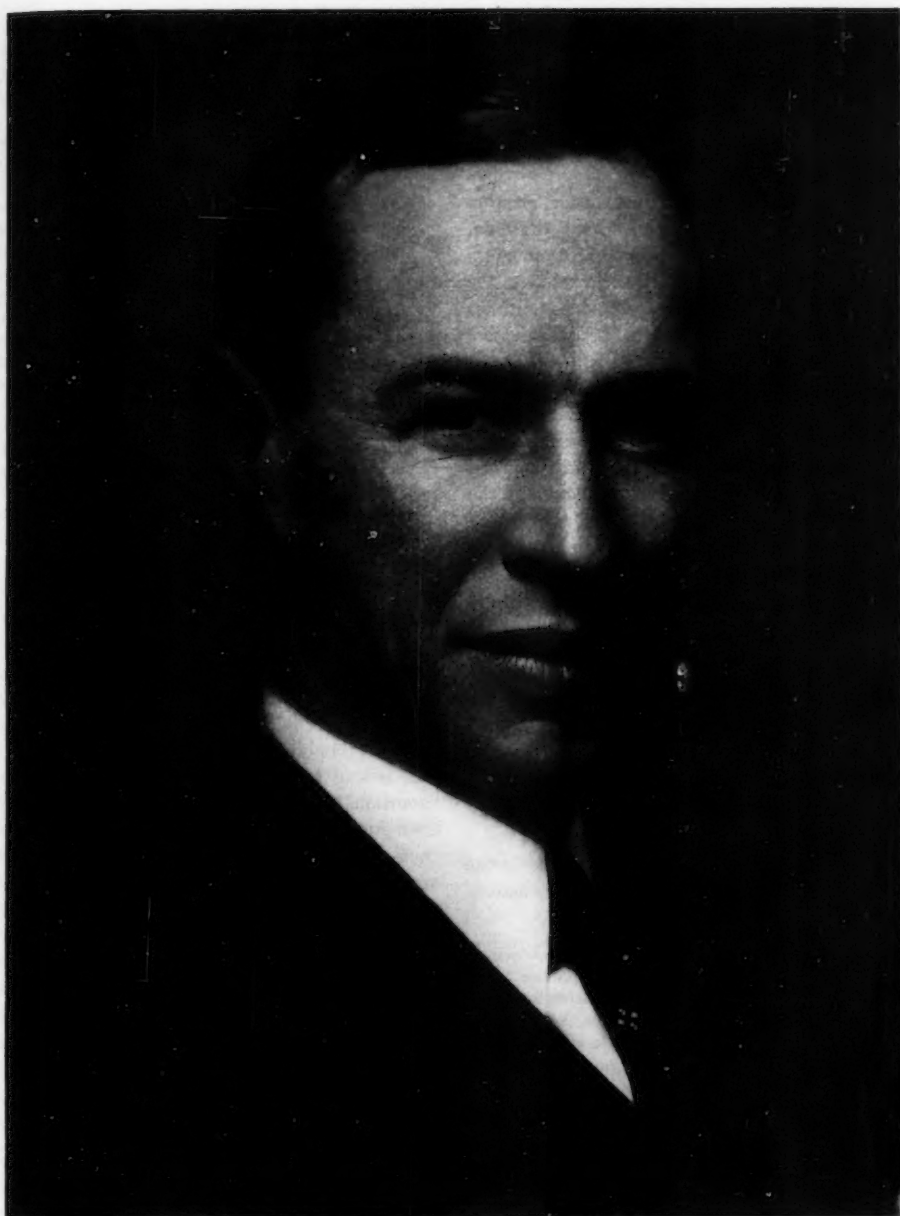
The meeting, which was of the informal, open type, was begun with a brief period of introduction in which each person identified himself to the group with respect to institution and major field of interest, and then was thrown open to general discussion of

ways in which the needs of the affiliates could better be served. Topics discussed included ways and means of calling the student affiliateship to the attention of greater numbers of eligibles (it would seem that many have not yet heard of it); the possibility of asking department chairmen to appoint faculty members to serve in a liaison capacity at their respective institutions; the relationship between the student affiliate program and existing psychology clubs including Psi Chi; the possibility of setting up an organization of student sub-committees; types of student affiliate programs to be held at regional and national meetings; and ways and means of communicating within the group.

WALTER C. SHIPLEY,
Chairman, Committee on Student Affiliates

BULLETIN ON MINOR RESEARCH PROBLEMS

Students at Ohio State University have expressed a desire to have access to information obtained by other students in carrying out minor research problems. Accordingly, the local chapter of Alpha Psi Delta, psychology honorary, sponsored a bulletin for this purpose; students and faculty members were invited to contribute. The first number (mimeographed) was distributed in May and contained abstracts of reports and reviews of student research. Anyone wishing further information may write Barry Jensen, Department of Psychology, Ohio State University, Columbus 10, Ohio.



Bachrach

RENSIS LIKERT

Director, Survey Research Center, University of Michigan

Chairman, Policy and Planning Board, American Psychological Association

Across the Secretary's Desk

THE POLLS: STRAW VOTES OR SCIENTIFIC INSTRUMENTS¹

The failure of the polls to forecast the last election has raised many questions concerning their accuracy. In the minds of some people even more serious questions are being asked as to whether the basic variables of social psychology, such as attitudes and behavior, can be dealt with in quantitative terms.

These questions might be more disturbing to social psychologists if they had been unaware of the dangers in polling methodology. But social psychologists and statisticians have repeatedly pointed out the inadequacy of the methods employed by the pollsters and the probability of error.

Available evidence indicates that an important cause of the failures of the polls in 1948 was the methodological deficiencies for which the polls, and consumer market research generally, have been criticized for some time. One important source of error is the use of the quota method of sampling. It is not a random method and so is always subject to selective bias. For example, analyses of several samples made by the well-known polling organizations have shown that they consistently underrepresent the low income, low educational groups by about ten to twenty percentage points.

The seriousness of this error was pointed to in the report² of the Technical Committee investigating Gallup's 1944 predictions:

(1) The quota-sampling method used, and on which principal dependence was placed, does not provide insurance that the sample drawn is a completely representative cross-section of the population eligible to vote, even with an adequate size of sample. In general, the major defects of the quota-sample method lie, first, in the method of fixing quotas, and, second, in the method of selection of respondents for the interview . . .

¹ This statement concerning the failure of the pre-election polls to predict the results of the 1948 Presidential election was prepared at the editor's request by Rensis Likert.

The January *American Psychologist* will include a discussion of the ethics of the commercial polling agencies which was written by Robert C. Myers several months before the recent election.

² Hearings before the Committee to Investigate Campaign Expenditures, House of Representatives, 78th Congress, 2nd Session on H. Res. 551, Part 12, U. S. Government Printing Office, Washington, 1945.

With respect to the second point, the method provides a freedom of choice to individual enumerators in the selection of respondents within the various categories or quotas. For example, even though the enumerator does obtain the proper quota of persons of a given age or income level, he may unwittingly obtain persons who are not representative with respect to education, church affiliation, employment, attitude toward the war, or other characteristics, and in particular with respect to voting preference or with respect to any other variable being sampled. The possibilities of such unintended bias are in fact recognized by the Gallup organization—namely, in the use of an adjustment based on past voting behavior and in the use of checks which are regularly made with respect to such data as telephone subscription, car ownership, and occupation.

When the quota method of sampling is used, such adjustments may be desirable, but it may be pointed out that it is never possible to know all of the kinds of unintended bias that may actually creep into the sample, and that adjustment for one or several known biases provides no insurance against other biases, some of which may seriously affect the results.

It is not necessary to rely on quota samples, for methods for obtaining random samples are available and being used. The methods usually are called area or probability samples.³

A second important source of error was the assumption by the pollsters that they could apply error formulas computed for probability samples to their samples. They have frequently published statements to the effect that these formulas apply to their polls. These formulas do not apply since their samples are not random. All persons in the universe do not have an equal or known chance to come into the sample; quota samples appear to be biased in the direction of including an excessive proportion of the kind of people that are readily available and are easy or pleasant to interview. Had the pollsters been more consciously aware of the biases in their samples and had they not relied

³ Hansen, Morris H. and Hurwitz, William N. *A New sample of the population*. Bureau of the Census, Washington, Sept., 1944.

Housman, Earl E. The sample design for a national farm survey by the Bureau of Economics. *J. Farm Econ.*, 29, No. 1, Feb., 1947.

Goodman, Roe. *Sampling for the 1947 survey of consumer finances*. Survey Research Center, University of Michigan. *The Labor Force Bulletin*. No. 5, Bureau of the Census, Washington, Nov., 1944.

on these error formulas they certainly would have been less positive in their predictions.

A third source of error in the pollsters' predictions was the use of arbitrary adjustments. The report of the Technical Committee⁴ also contained the following:

As a result of the sampling method used and of the inadequate size of sample for a number of the individual State estimates, individual judgment was introduced into the preparation of the election estimates; for example, reliance was placed on historical relationships shown in prior elections. Adjustments based on such factors, though they may yield better forecasts, depend on the judgment of the individual investigator, and should not be confused with the results of polls of public opinion. The use of estimates which combine polling results with the individual judgment tends to invite criticism, especially in the cases of those States where public opinion is nearly evenly divided.

A fourth source of error was reflected in the way the "don't know" or uncertain answers were interpreted. At least one of the polls assumed that the "don't know" group would distribute their votes in the same way as those who told how they would vote. This assumption reflects the inadequate psychological theory and research design generally employed by the polls. It is not adequate to accept the "don't know" answer or any answer at its face value in doing psychological research. Had a careful analysis been made of the motivational forces influencing the probability of *whether* people would vote and *how* they would vote, this analysis could have been used to design the questionnaires. Illustrative of the motivational forces that should have been measured are: attitudes toward the candidates, attitudes toward the issues under discussion, and data showing which issues the different respondents feel are important and which candidate they believe is most likely to deal with the issue in a manner satisfactory to them. Had this approach been used, the data would probably have shown that the "don't know" group were not likely to distribute their votes in the same proportions as those who answered for which candidate they expected to vote.

This approach emphasizing research design implies a more thorough type of interview than the yes-no ballot of the pollster employed in the "stand-up" interview. To get at motivational pat-

terns it is necessary to use indirect questions and intensive interviewing.

The poll results showed more instability in voting plans this year than in 1944. Gallup reported a shift of five and one-half percentage points in the last two months and there was a larger "don't know" group than usual. This instability should have been pointed out by the polls and caused them to be more cautious in their predictions. It is likely that had the polls measured the intensity of attitudes toward candidates and toward issues that they would have hesitated to make such unqualified predictions.

Various other sources of error such as inadequate training and supervision of interviewers were also present. Perhaps the best way to summarize the situation, however, is to say that the polls have been more like straw votes than scientific instruments. They have relied on rule of thumb methods and historical relationships rather than objective, precise methods.

Forecasting the outcome of an election is a far more difficult task than is ordinarily recognized. The single prediction requires making two difficult forecasts. It is necessary to predict both who will vote and how each voter will vote. Considering the difficulty of the problem and the relative crudeness of the methods employed, it is surprising how accurate the predictions of the polls have generally been.

The past success of the polls in predicting elections seems to have had an unfortunate effect. It has lulled the pollsters into a sense of security with their methods. They have given limited attention to the newer improvements in methodology and have done inadequate experimenting with these methods.

The newer methods such as probability or area samples and fixed question-free answer interviewing are more costly than polling techniques. This additional cost, without doubt, has been one of the reasons why the pollsters have not employed them.

When cost limitations compel economy, however, it seems unwise to attempt this economy by using methods which may yield results with biases of unknown magnitude. When economy is necessary, it is better to take such steps as reducing the size of the sample. This will increase the size of the error but so long as objective methods are used, the probable range of error can be computed with confidence.

If any problem in the social sciences is important enough to study, it should be studied with methods which will yield accurate and unbiased results.

RENSIS LIKERT, *University of Michigan*

⁴ Hearings before the Committee to Investigate Campaign Expenditures, House of Representatives, 78th Congress, 2nd Session on H. Res. 551, Part 12, U. S. Government Printing Office, Washington, 1945.

Psychological Notes and News

The American Board of Examiners in Professional Psychology is now ready to accept candidacies from those members of the American Psychological Association whose Baccalaureate degrees were received on and after 1 January 1936, who hold the PhD degree, and who can present five years of acceptable qualifying experience in one of the following three professional fields: clinical psychology; industrial psychology; and counseling and guidance. Such candidacies fall in the category in which written and oral examinations are mandatory.

At the time of the original survey made by the Board, in July, 1947, approximately 250 members of the American Psychological Association indicated that they fell in this category, or would fall in the category during the year 1948. Individual letters will be addressed to these psychologists at their last known address, enclosing an application blank.

This present general notice is to inform this group and others who may be interested in applying that application blanks may be obtained from: John G. Darley, Secretary-Treasurer, Psychology Building, University of Minnesota, Minneapolis 14, Minnesota.

In order to prepare a roster for the first examinations of the Board, to be held in the fall of 1949, it is desired that candidates described above file their completed application materials with the Secretary-Treasurer on or about 1 January 1949.

—JOHN G. DARLEY.

The Social Science Research Council has appointed a committee of research authorities to find out why the poll takers were wrong about the recent election. The three largest polling agencies have agreed to open their records for full scrutiny by the committee, which consists of Samuel S. Wilks, director of the section of mathematical statistics, Princeton, as chairman; and James Phinney Baxter, 3d, president of Williams College; Carl I. Hovland, chairman of the department of psychology, Yale; Isador Lubin, chairman of the committee on statistical standards of the American Statistical Association; Frank Stanton, president of the Columbia Broadcasting System; Frederick F. Stephan, director of the study of education, Princeton; and Samuel A. Stouffer, director of the laboratory of social relations, Harvard.

SPSSI has announced a new Edward L. Bernays Award for 1948-49 of \$1,000, to be presented to the individual or group contributing "the best action-related research on some aspect of the problem of improving relations between groups within the United States." The contest is open to all social scientists here and abroad. All research published or completed during 1948-49 will be eligible for the competition, which closes July 1, 1949. Manuscripts reporting completed research, but not yet published, will also be eligible. All reports should be submitted in duplicate to the Chairman of the Intergroup Relations Award, Dr. Gordon W. Allport, Department of Social Relations, Harvard University, Cambridge 38, Massachusetts. Inquiries should be addressed to Dr. Ronald Lippitt, President of the Society for the Psychological Study of Social Issues, Research Center for Group Dynamics, University of Michigan, Ann Arbor, Michigan.

The first three numbers of the 1948 *Psychological Monographs* have been distributed to the 1948 subscribers to Clubs A and C.

Their 1949 dues had been paid on November 22, 1948 by 2193 members of the APA and by 506 student affiliates. December 31, 1948 is the deadline.

The APA office is completely out of certain 1947 and 1948 issues of the journals. As a result, we are unable to replace missing library issues or send complete sets to new libraries. One hundred copies of these issues would probably be all we would need for this purpose, but any number would help. If there are APA members who do not save their journals to make complete sets, the APA office at 1515 Massachusetts Avenue N. W., Washington 5, D.C., would be glad to receive the following issues:

Journal of Abnormal and Social Psychology, 1948, #3 (July).

Journal of Comparative and Physiological Psychology, 1947, #1 (February); #2 (April).

Journal of Consulting Psychology, 1947, #1 (January-February); #2 (March-April).

Psychological Bulletin, 1947, #1 (January); #4 (July); 1948, #1 (January).

W. E. Watson, Graham B. Dimmick, George A. Muench, Frank Pattie and M. L. Billings have been appointed by the Governor of the State of Kentucky to act as a Board of Examiners in the Certification and Licensing of Psychologists in the State of Kentucky.

The Kentucky Legislature passed a bill in the recent session of the legislature, making provisions for the certification of clinical psychologists through a State Board of Examiners of Psychologists. The bill includes a definition of the practice of clinical psychologists, board of examiners, the report of the board to the governor, rating of educational institutions, certification, fees, suspension or revocation of certificate, and use of title and penalties.

The officers and chairmen of standing committees of the Chicago Psychological Association for 1948-1949 are: William A. Hunt, president; J. Anthony Humphreys, vice-president; William C. Krathwohl, secretary; Anna S. Elonen, treasurer; and Martin L. Reymert, member of the executive board. The chairmen of the standing committees are: Robert L. French, Program; William Sloan, Membership; J. L. Hirning, House.

At its annual meeting in December, 1947, the Connecticut State Psychological Society adopted the following resolution:

The Connecticut State Psychological Society shall go on record as approving the following statement of policy: Training designed to develop skill in the administration of individual tests of intelligence and personality should be given only to graduate students or holders of the Bachelor's degree who are receiving internship training, and only under the supervision of psychologists who have themselves received professionally adequate training in testing and test interpretation.

Subsequently, the resolution was mailed to all institutions in Connecticut that offer training of any kind in psychology.

The North Carolina Psychological Association held its fall meeting at Duke University on October 23, 1948, with John W. Macmillan of the Office of Naval Research, Washington, D. C., as speaker.

Raymond V. Bowers has been appointed executive director of the Committee on Human Resources of the National Research and Development Board.

During the past year he served as deputy executive director. The other civilian members of the Committee's full-time staff are: Dwight W. Chapman, deputy executive director, and Henry S. Odbert, panel director.

The civilian members and deputy members of the Committee are: Donald G. Marquis, chairman; William C. Menninger, Carroll L. Shartle, Samuel A. Stouffer, Henry Brosin (deputy), Walter S. Hunter (deputy), and Frederick F. Stephan (deputy).

The civilian members of the panels are:

Panel on Human Engineering and Psychophysiology: Arthur W. Melton, chairman; Frank A. Geldard, John L. Kennedy, and Lyle H. Lanier.

Panel on Personnel and Training: Robert L. Thorndike, chairman; John G. Darley, James G. Miller, and Marion W. Richardson.

Panel on Manpower: Philip M. Hauser, chairman; J. Douglas Brown, Meredith B. Givens, Gladys L. Palmer, and Irene Taeuber.

Panel on Human Relations and Morale: Charles Dollard, chairman; Carl I. Hovland, Alexander Leighton, and Hans Speier.

In addition, the Committee and Panels have the following special consultants for expert advice in various areas of their programs: Harry Alpert, Charles W. Bray, W. J. Brogden, F. J. Brown, Kingsley Davis, Douglas G. Ellson, John Gardner, J. J. Gibson, M. J. Hagood, H. K. Hartline, Pendleton Herring, Harold Lasswell, Rensis Likert, Leonard C. Mead, Ernest McCormick, Don K. Price, R. G. Scobee, Arnold Small, J. C. Snidecor, S. S. Stevens, Franklin V. Taylor, Herbert A. Toops, M. H. Trytten, Emmett Welch, Delos D. Wickens, E. C. Wilson, and Dael Wolfe.

Lieutenant Colonel Jack Buel, MSC, USAF Director of the department of psychology, USAF School of Aviation Medicine, Randolph AFB, Texas, has been appointed by the Secretary of the Air Force an associate member on the Committee on Human Resources of the National Research and Development Board.

As a memorial to the late Professor Rudolf Pintner, his friends and former students are planning a revision of his *Intelligence Testing*. Donald G. Paterson is chairman of the Editorial Committee for the revision. To date, the other members are A. R. Gilliland, Gertrude Hildreth, Walter N. Durost,

John A. Long, and Seth Arsenian, chairman of the Memorial Committee. For further information, write to Dr. Seth Arsenian, Department of Psychology, Springfield College, Springfield, Massachusetts.

The Indiana Association of Clinical and Applied Psychologists has announced the election of the following officers in November: Delton Beier, president; Gladys D. Frith, vice-president; Harriet E. O'Shea, Executive Committee, and Walter L. Wilkins, secretary-treasurer. The association passed a resolution reading in part as follows: "... this association puts itself on record as expressing its appreciation to Dr. Harriet E. O'Shea for her constructive leadership and untiring energy in furthering the advancement of professional psychology in the State of Indiana in her ten years as President of the Indiana Association of Clinical and Applied Psychologists ..."

The Psychological Laboratories of the Connecticut State Hospital now consist of the following staff: Jules D. Holzberg, director of the Psychological Laboratories; Eleanor R. Cahen, Salvatore Alessi, and Murray Wexler, staff psychologists; and Muriel Chamoulaud, Frederica Jefferson, and Oscar B. Leibman, psychological interns for 1948-1949.

Other appointments for the current year in the department of psychology of the University of Chicago, which were omitted from the list in the November issue, are: Ward C. Halstead, professor of experimental psychology in the department of psychology and the division of psychiatry of the department of medicine; Austin H. Riesen, associate professor (arriving from Yerkes Laboratories of Primate Biology in 1949); Elias H. Porter, Jr., research associate (associate professor); Anna S. Elonen, assistant professor in the department of psychology and the division of psychiatry of the department of medicine; John M. Butler, instructor and assistant counselor in the Counseling Center; Leota L. Janke, instructor; and William F. Soskin, instructor in the department of psychology and the division of psychiatry of the department of medicine.

Civilian psychologists will be tendered reserve commissions in the Army if they apply and qualify under provisions outlined in Department of the Army Circular No. 210, dated July 14, 1948. The

commissions range from those of First Lieutenant up to and including Colonel, depending upon qualifications and experience. Applicants must be at least 21 years of age and not over 55 and citizens of the United States; previous military experience is not required; they must be professionally engaged in teaching or research and development in theoretical or applied fields. Further information may be obtained from the Adjutant General, Department of the Army, Washington 25, D. C.

In an effort to establish a Reserve Officers' training program for scientists that will be of more interest than the usual Reserve Officer's meeting, the Army is establishing Organized Reserve Research and Development Groups. The Technical Services of the Department of the Army submit to these Research and Development Groups research problems and projects which pose an intellectual challenge to members of the group. Thus, the program provides members a type of training which is in keeping with their scientific and technical interests and competence, rather than a traditional kind of training session in which scientists have little or no interest. To date, eighteen such groups have been organized, at large universities, industrial research laboratories, and so on. The entire program is outlined in Section V, Department of the Army Circular #127, dated May 5, 1948.

Teacher in experimental, about February 1949, rank assistant or associate professor, man, 30 to 40 years, PhD, new PhD acceptable; to be director of laboratory courses in experimental psychology. Salary dependent on experience and qualifications. Apply to Dr. Roland C. McKee, Acting Chairman, Department of Psychology, Syracuse University, Syracuse 10, New York.

Teacher in either experimental or in clinical, about February 1949, rank assistant professor, either sex, age below 40, PhD preferred; to teach general-experimental-animal sequence or to teach and do clinical work. Salary \$3,500. Apply to Dr. P. T. Teska, Chairman, Department of Psychology, Louisiana State University, Baton Rouge, Louisiana.

Clinical psychologist, as soon as possible, rank Michigan Civil Service grade III, either sex, no age limits, MA, four years' experience, one of which may be an internship; to work in Child Guidance Clinic under state mental hygiene program. Salary

\$4020 with semi-annual increases to a maximum of \$4740 after two years. Apply to Dr. Norman Westlund, Director, Saginaw Valley Children's Center, 1501 North Michigan Avenue, Saginaw, Michigan.

Clinical psychologist, as soon as possible, rank assistant or associate professor, man, not over 40, PhD, appropriate experience; to supervise graduate students in clinical psychology and teach psychotherapy and projective techniques. Salary \$3600-\$5000 for academic year, plus consultation fees. Apply to Dr. Axel Brett, Chairman, Department of Philosophy and Psychology, University of Tennessee, Knoxville, Tennessee.

Clinical psychologist, as soon as possible, rank and salary to be arranged; to participate in both formal and practicum aspects of the graduate training program in clinical psychology. Apply to Dr. Chester C. Bennett, Professor of Clinical Psychology, Boston University, Boston 16, Massachusetts.

Clinical psychologist, as soon as possible, rank not stated, MA or PhD, diagnostic testing and some therapy experience with children and adults required; to direct the psychological services of the Peoria Mental Hygiene Clinic. Salary dependent on qualifications. Apply to Dr. Walter H. Baer, Director, Peoria Mental Hygiene Clinic, 300 North Monroe Street, Peoria 3, Illinois.

Civilian clinical psychologists, as soon as possible, rank P-4 and higher (U. S. Civil Service), PhD preferred; MA in psychology demanded, with two years' full-time clinical experience; to serve in the Neuropsychiatric Service at U. S. Naval Hospitals, Naval Training Centers, Naval Disciplinary Barracks, and Marine Corps Bases. Apply to Navy Department, Bureau of Medicine and Surgery, Attn: Professional Division, Washington 25, D. C.

Clinical psychologist, as soon as possible, rank chief psychologist in Community Guidance Clinic which is associated with the Southwestern Medical College, man preferred, PhD and three years' experience or ABEPP certification, to perform usual duties of a head of a university clinic, including research. Salary \$5364. Apply to Dr. Don P.

Morris, Director, Community Guidance Clinic Southwestern Medical College, Dallas 4, Texas.

Commissioned clinical psychologists, as soon as possible, PhD (or nearly) required, for Naval Reserve officers; preference given to those who filled psychological billets in World War II, but previous military experience is not a requisite; to be assigned to Clinical Psychology billets, Neuropsychiatry Service in continental Naval Hospitals, Naval and Marine Training Centers, Re-training Commands, and Disciplinary Barracks. Salary dependent on rank. Apply for information to the Navy Department, Bureau of Medicine and Surgery, Attn: Professional Division, Washington 25, D. C.

Instructor and assistant professor, for January 4, 1949, if possible; either sex; to teach General, Educational and Child. Salaries: \$3600 or more; and \$4200 or more, for eleven months. Applications with complete credentials should be submitted to Paul F. Finner, Head, Department of Psychology, Florida State University, Tallahassee, Florida.

Clinical psychologists at salaries of \$325-375 per month; continuous recruitment. For announcements and applications write to Utah Merit System Council, 428 Atlas Building, Salt Lake City 1, Utah.

Clinical psychologist, last date for filing application is January 10, 1949, rank senior psychologist, man or woman, over 21, PhD, or MA and one year's experience. Salary \$350-420 per month. Write for applications to San Francisco Civil Service Commission, 151 City Hall, San Francisco 2, California.

School psychiatrist, beginning September 1949, MD, three to five years' experience; to serve as school psychiatrist in the New York City Schools. Salary \$8,000 first year; \$9,000 second year; \$10,000 third year and thereafter. Apply for announcement to Board of Examiners, Board of Education, City of New York, 110 Livingston Street, Brooklyn 2, New York.

December 21, 1948 is the closing date for application for the Junior Professional Assistant examination (U. S. Civil Service grade P-1, \$2974) in psychology and in statistics. Students who expect to graduate in June may apply now.

INDEX TO VOLUME 3

INDEX OF AUTHORS AND PORTRAITS

- ADKINS, DOROTHY C., 104
 ANDERSON, JOHN E., 409
 ANDREWS, T. G., 533
 BECK, LESTER F., 338
 BELLows, ROGER, 539
 BENNETT, GEORGE K., *portrait*, 65
 BINGHAM, WALTER V., 321
 BLAKE, R. R., 124
 BUXTON, CLAUDE E., 354
 CARPENTER, E. KENNETH, 172
 CARTER, JERRY W., JR., 57
 CATTELL, RAYMOND B., 193
 CHAUNCEY, HENRY, *portrait*, 112
 CHEIN, ISIDOR, 43
 Committee on Training in Clinical Psychology, 317
 Convention Program Committee, 77
 COOK, STUART W., 43
 DARLEY, JOHN G., 51
 DAVID, HENRY P., 133
 DREESE, MITCHELL, 533
 DUDYCHA, GEORGE J., 543
 ELLIOTT, RICHARD M., 51
 ELLIS, ALBERT, 511
 FEDERIGHI, HENRY, 30
 GORDON, THOMAS, 166
 GRAHAM, CLARENCE H., *portrait*, 208
 GREGG, ALAN, 397
 GRUMMON, DONALD L., 166
 GUEST, LESTER, 135
 GUILFORD, J. P., 3
 HACKBUSCH, FLORENTINE, 85
 HANDRICK, FANNIE A., 541
 HARDING, JOHN, 43
 HATHAWAY, STARKE R., 51
 HOBBS, NICHOLAS, 80
 HOLSOPPLE, JAMES Q., 101
 HOPPOCK, ROBERT, 417
 IRWIN, FRANCIS W., 91
 JACOBSEN, CARLYLE, *portrait*, 123
 KLUCKHOHN, CLYDE, 439
 LEUBA, CLARENCE, 30
 LIKERT, RENSIS, *portrait*, 555
 LIPSETT, LAURENCE, 12
 LUCHINS, ABRAHAM S., 203
 MARQUIS, DONALD G., 430; *portrait*, 429
 MARTIN, HERMON W., 101
 MCQUITTY, LOUIS L., 16
 MUNN, NORMAN L., 88
 OLDER, HARRY J., 101
 PATERSON, DONALD G., 51, 419
 PATTERSON, C. H., 155
 PEAK, HELEN, 470; *portrait*, 377
 Policy and Planning Board, 187
 PRESSEY, SIDNEY L., 107
 RAIMY, VICTOR C., 513
 ROBINSON, FRANCIS P., 111
 ROGERS, LAWRENCE S., 373
 RUJA, HARRY, 199
 SEASHORE, CARL E., 443
 SEASHORE, HAROLD G., 366
 SHAKOW, DAVID, *portrait*, 178
 SHOEN, EDWARD J., JR., 127
 SMITH, LEO F., 12
 SNYDER, WILLIAM U., 319
 THORNE, FREDERICK C., 160
 THURSTONE, L. L., 402
 TROW, WM. CLARK, 57
 TUDDENHAM, READ D., 54
 VINACKE, W. EDGAR, 446
 WEITZ, JOSEPH, 324
 WILSON, JAMES W., 172
 WOLFLE, DAEL, 503
 WOLFLE, HELEN M., 95

INDEX OF COMMENT CONTRIBUTORS

- ALLPORT, GORDON W., 206, 375
 BALLIN, MARIAN R., 553
 BERDIE, RALPH F., 207
 BINGHAM, WALTER V., 174
 BIXLER, RAY H., 376
 BORING, EDWIN G., 173
 BORNEMANN, AENNE, 59
 BORNEMANN, ERNST, 59
 DAVID, HENRY P., 206
 DREVER, JAMES, JR., 547
 DUNGAN, IRVINE M., 450
 EKAS, GERTRUDE S., 450
 FISICHELLI, REGINA MOLLOY, 173
 FISICHELLI, V. R., 173
 ICHHEISER, GUSTAV, 451
 IRWIN, FRANCIS W., 553
 KIMBER, J. A. MORRIS, 550
 LOEVINGER, JANE, 551
 MAC NITT, R. D., 375
 MEYER, MAX F., 375
 MILLER, NEAL E., 374
 MORLAN, GEORGE K., 374
 NEWLAND, T. ERNEST, 207
 PATERSON, DONALD G., 60, 174
 PRATT, CARROLL C., 207
 PRESSEY, S. L., 176
 SEYMOUR, RICHARD B., 551
 SHAFFER, LAURANCE F., 374
 SKARD, AASE GRUDA, 110
 STEPHENSON, WILLIAM, 547
 STRONG, EDWARD K., JR., 174
 TEICHER, ARTHUR, 450
 UDOW, ALFRED B., 374

JOURNAL OF CONSULTING PSYCHOLOGY

Edited by
LAURANCE F. SHAFFER
Teachers College, Columbia

THIS JOURNAL is of particular interest to clinical psychologists, psychiatrists, school psychologists, rehabilitation workers, and persons who are engaged in counseling and guidance work.

Recent articles have summarized Rorschach experiments, the history of clinical psychology and research on the Thematic Apperception Test.

Issued bi-monthly

\$5.00 per year

Address orders to
**American Psychological
Association**
1515 Massachusetts Avenue, N.W.
Washington 5, D. C.

*The most popular
Psychological
Monograph
now in its
third printing
is*

ABSTRACT AND CONCRETE BEHAVIOR

by **KURT GOLDSTEIN
and MARTIN SCHEERER**

1941

\$2.25

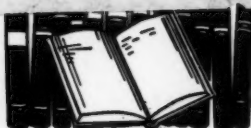
order from
**AMERICAN PSYCHOLOGICAL
ASSOCIATION**

1515 Massachusetts Ave., N.W.

Washington 5, D. C.

Miss Esther L. Belcher,
Dept. Public Ins., Div. Sp. Educ.,
Lansing 2, Mich.

34-00-00



New **McGraw-Hill** Books

ESSENTIALS OF PSYCHOLOGY

By DONALD M. JOHNSON, University of Minnesota. *McGraw-Hill Publications in Psychology.* 485 pages, \$3.50

A new fundamental textbook for the beginning student, offering a complete, modern, well rounded survey of the subject, written from a biosocial point of view. Recent advances in the field are interwoven with the more traditional material. Contributions from the Second World War appear in several chapters; the chapter on personality includes much new material on the origin of specific personality traits; and recent data on attitudes and public opinion are covered briefly.

THEORY AND PROBLEMS OF SOCIAL PSYCHOLOGY

By DAVID KRECH, University of California, and RICHARD S. CRUTCHFIELD, Swarthmore College. *McGraw-Hill Publications in Psychology.* 622 pages, \$4.50

This basic text is the first modern work of its kind to develop an integrated and consistent approach to the science of psychology as a systematic, interpretative account of social behavior. A large part of the book is devoted to the basic principles of human behavior, which are then "spelled out" in their operation in such behavior as racial prejudice, labor-management conflict, propaganda, group morale, leadership, international tensions, etc.

PSYCHOLOGY OF PERSONALITY. New 2nd edition

By ROSS STAGNER, Dartmouth College. *McGraw-Hill Publications in Psychology.* 485 pages, \$5.00

Entirely rewritten, this well known text has been brought up to date to cover recent advances in the field. The theoretical aspect of the new edition has been changed from a point of view primarily behavioristic in character to one stressing perception, frame of reference, and the inner organization of experience. An important feature is the inclusion of a chapter on the Self in personality organization.

ABNORMAL PSYCHOLOGY

By JAMES D. PAGE, Temple University. *McGraw-Hill Publications in Psychology.* 450 pages, \$4.00

This superior new text comprehensively covers the subject in language that is readily understandable to the college student with a limited knowledge of psychology. The material is exceptionally well organized, and is remarkable for its careful and accurate statement, supported by a wealth of clinical and experimental evidence, much of it drawn from the author's own experience. A feature of the book is a 13-page glossary of psychological terms.

Send for copies on approval



McGraw-Hill Book Company, Inc.

330 WEST 42ND STREET, NEW YORK 18, N. Y.

pk

gy.

l surv
ren wi
ers; d
d rece

e. M

h to th
the bo
in su
intern

, \$5.0

the fie
ristic
ce. A

s, \$4.0

e to th
ed, an
iment
glossa

NC

Y.